



AGENDA

EBMUD Treatment Plant, Lab Library

Agenda Item

Pages

[illegible]

| | | | |
|--|--|--|---------|
| OTHER BUSINESS - OPERATIONAL | | | |
| 14 | <u>Discussion</u> : Update on the Wastewater Operator Training Program | 12:00 PM | 84-88 |
| 15 | <u>Discussion</u> : Executive Board Meeting Format | 12:10 PM | |
| REPORTS | | 12:20 PM | |
| 16 | Committee Reports | | 89-129 |
| 17 | Member Highlights | | |
| 18 | Executive Director Report | | 130-137 |
| 19 | Regulatory Program Manager Report | | 138 |
| 20 | Other BACWA Representative Reports | | |
| | a. RMP TRC | Rod Miller | |
| | b. RMP Steering Committee | Karin North; Leah Walker; Jim Ervin | |
| | c. Summit Partners | Dave Williams; Laura Pagano | 139-140 |
| | d. ASC/SFEI | Laura Pagano; Jim Ervin; Dave Williams | |
| | e. Nutrient Governance Steering Committee | Jim Ervin; Mike Connor | |
| | f. SWRCB Nutrient SAG | Dave Williams | |
| | | WEBSITE | 141-142 |
| | g. SWRCB Focus Group – Bacterial Objectives | Lorien Fono; Amy Chastain | |
| | h. SWRCB Focus Group – Mercury Amendments to the State Plan | Tim Potter; Laura Pagano; David Williams | |
| | i. Nutrient Technical Workgroup | Eric Dunlavey | |
| | j. NACWA Taskforce on Dental Amalgam | Tim Potter | |
| | k. BAIRWMP | Cheryl Munoz; Linda Hu; Dave Williams | |
| | I. NACWA Emerging Contaminants | Karin North; Melody LaBella | 142-146 |
| | | PRESENTATION | |
| | m. CASA Statewide Pesticide Steering Committee | Melody LaBella | |
| | n. CASA State Legislative Committee | Lori Schectel | |
| | o. CASA Regulatory Workgroup | Lorien Fono | |
| | p. ReNUWit | Mike Connor; Karin North | |
| | q. RMP Microplastics Liaison | Nirmela Arsem | |
| | r. AWT Certification Committee | Maura Bonnarens, | |
| | s. Bay Area Regional Reliability Project | Roger Bailey; Mike Connor | |
| | t. WateReuse Working Group | Cheryl Munoz; | |
| 21 SUGGESTIONS FOR FUTURE AGENDA ITEMS | | 12:27 PM | |
| NEXT MEETING The next regular meeting of the Board is scheduled for June 16, 2017 from 9:00 am – 12:30 pm at the SFPUC, Hetch Hetchy Room, 13th Floor, 525 Golden Gate Ave., San Francisco, CA | | 12:28 PM | |
| ADJOURNMENT | | 12:30 PM | |

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Laura Pagano (San Francisco Public Utilities Commission); Jim Ervin (San Jose); Michael Connor (East Bay Dischargers Authority); Eileen White (East Bay Municipal Utility District); Lori Schectel (Central Contra Costa Sanitary District).

Other Attendees:

| <u>Name</u> | <u>Agency/Company</u> |
|-------------------|---------------------------|
| Amanda Roa | Delta Diablo |
| Tom Hall | EOA |
| Linda Sawyer | Brown & Caldwell |
| Sarah Deslauriers | Carollo |
| Greg Baatrup | FSSD |
| Roger Bailey | CCCSD |
| Greg Kester | CASA |
| Rusty Holloman | SFEI |
| David Senn | SFEI |
| Nirmela Arsem | EBMUD |
| Vince De Lange | EBMUD |
| Amy Chastain | SFPUC |
| Denise Connors | Larry Walker & Associates |
| Ralph Eschborn | AECOM |
| David Williams | BACWA |
| Lorien Fono | BACWA |
| Sherry Hull | BACWA |

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER

The Lab Committee Report was taken out of order as the first item on the Operational portion of the agenda.

CONSENT CALENDAR

1. March 17, 2017, BACWA Executive Board Meeting Minutes – The approved minutes will be posted on the BACWA website.
2. February, 2017 Treasurer's Reports and Financial Summary – A Financial Summary Report was included in the Packet. A copy of the FY17 Budget as of February 28, 2017, (67% of the fiscal year) was included. It, along with the Summary, provides the Board with a concise overview of the Fund Balances and the current status of the Annual Budget and points out any

variances in the budget to date. The Executive Director noted that the Funds Report now includes a report on the Alternative Investments and, because those investments are less liquid than previous investments, this new report is included to provide a check on BACWA liquidity.

Consent Calendar items 1 and 2 were approved in a motion made by Michael Connor and seconded by Eileen White. The motion carried unanimously.

AUTHORIZATIONS & APPROVALS

3. Approval: FY18 BACWA Budget & Workplan – A Board Authorization Request was included in the Packet. The Executive Director gave an overview of changes to the Budget since the last meeting.

Item 3 was approved in a motion made by Michael Connor and seconded by Lori Schectel. The motion carried unanimously.

4. Approval: Agreement with ABAG to Administer Proposition 84 – A Board Authorization Request was included in the Packet. The Executive Director gave an overview of the request.

Item 4 was approved in a motion made by Eileen White and seconded by Lori Schectel. The motion carried with one abstention.

5. Chair Authorization: Biosolids Research - A Chair Authorization was included in the Packet. The Executive Director gave an overview of the Authorization.

OTHER BUSINESS-POLICY/STRATEGIC

Agenda Item 6 – Discussion: Nutrients

a. Regulatory

- i. Layperson's Guide to Nutrients – a LINK to the Guide was included in the Packet. The Executive Director gave an overview of the changes to the Guide.
- ii. 2nd Watershed Permit – The Executive Director gave an overview of potential key tenets and the schedule for the next Nutrient Watershed Permit. Based on informal input, there is wide support for increased contributions to science beginning in FY18. There will be continued discussions with the Water Board on increased contributions and voluntary actions, with BACWA working toward obtaining a statement from each member agency on a tentative commitment to increase funding for scientific studies in lieu of load caps for the next permit term. BACWA will request a letter of intent from the Regional Water Board memorializing this agreement regarding the 2nd Watershed Permit in the next three months. It was also suggested that BACWA request a statement of support for this approach from the EPA.

- iii. Interview with Bay Area Monitor – The Executive Director gave the Board an overview of his interview with the Bay Area Monitor, published by the League of Women Voters of the Bay Area Education Fund, regarding nutrients. An article is expected in the Fall edition of the Bay Area Monitor.
- b. Technical Work -
 - i. Nereda Nutrient Removal Technology (Aerobic Granular Sludge) – A memo from AEDCOM was included in the Packet. They have obtained matching funding for a WRF study involving a demonstration project at FSSD and are soliciting contributions or participation from BACWA members for the project. The Executive Director gave an overview of the request including budget timing and requesting direction from the Board on if or how BACWA should be involved in new technology research. BACWA could act as a facilitator to provide pass-through funds from BACWA member participants and contributors and in return receive periodic updates on the technology. BACWA would also work with the Regional Water Board to get credit for any agency that participates in similar pilot projects in terms of “early actions” on nutrients. It was also suggested that BACWA contact ReNUWI to help BACWA plan future participation in new technology.
 - ii. Impacts on Bay of Sidestream Treatment – Rusty Holloman of SFEI gave a presentation on modeling the San Francisco Bay water quality and any improvements from sidestream treatment. His preliminary models show that sidestream treatment would have a measurable effect on nutrient concentrations in the South Bay, but the change in concentration in the North Bay would be negligible, since the preponderance of nutrient loads are derived from upstream in the Delta.
 - iii. Upcoming Workshops – A memo from SFEI regarding two upcoming NMS Technical workshops and a Draft Agenda for the BACWA Optimization/Upgrade Workshop #2 were included in the Packet. Dr. David Senn explained the process SFEI is using to plan the workshops so that there will be a balance between experts and stakeholders, without the discussion between the experts being overwhelmed. The Board requested that SFEI provide a report on the workshops. The Executive Director gave an overview of the Draft Agenda for the 2nd Optimization /Upgrade Workshop scheduled for June 7, 2017.
- c. Governance Structure -
 - i. Planning Subcommittee Meeting # 25 Debrief – Minutes of the meeting and supporting documents, along with a [LINK](#) to the Delta Nutrient Forms & Ratios were included in the Packet. The Executive Director gave an overview of the meeting.

Agenda Item 7 – Discussion: Toxicity

- i. 303 (d) List – The BACWA Comment Letter was included in the Packet. The comments resulted in the Bay-wide listing for toxicity being moved from Category 5 to Category 3 which applies where there is insufficient information to determine beneficial use support, but data indicate that uses may be threatened.
- ii. Pacifica Permit - The BACWA Comment Letter was included in the Packet. The

- Regulatory Program Manager gave an overview of the letter and asked the Board for direction on a possible permit petition. The Board agreed not to petition the permit.
- iii. State Toxicity Provision – A Summary and a [LINK](#) to Toxicity Provisions were included in the Packet. The Executive Director noted that the lawsuit by SCAP against the EPA was dismissed on a jurisdictional basis. The State has begun the rollout of the new Provisions. The Regulatory Program Manager gave an overview of the Summary and will work with the Permits Committee on proposed sensitive species language suggestions and other sections where BACWA has a particular stake.
 - iv. Toxicity Workshop – A Draft Agenda was included in the Packet. With the new Provisions released the Board suggested a workshop. The Regulatory Program Manager asked for any comments on the agenda and suggestions for speakers.

Agenda **Item 8** – Discussion: Update on BAAQMD Regulations – A Summary of the March 23, 2017 meeting with BAAQMD, the BACWA Letter on POTW planning constraints, and a BAR requesting revisions to the Scope of Work in the Carollo Agreement on Rule 11-18 was included in the Packet. The Executive Director gave an overview of the previous meetings on March 9 and March 23 with BAAQMD. BAAQMD agreed to move facilities from Phase 1 to Phase 2 of the implementation schedule. BACWA will develop a proposal on updating emissions factors that will be delivered to BAAQMD staff. The Executive Director described how the change in focus away from diesel emissions to other toxic air contaminants of concern, and the opportunity to work with BAAQMD staff on updating emissions factors necessitated a new Scope of Work for the Carollo Agreement on Rule 11-18 which is a no-cost change. CCCSD offered to share their report on TBARCT and associated costs with other BACWA members.

***Item 4** was approved in a motion made by Michael Connor and seconded by Lori Schectel. The motion carried unanimously.*

Agenda **Item 9** – Discussion: Mercury Water Quality Objectives and Beneficial Uses – An email from the State Water Resources Control Board regarding a Public Meeting to consider Adoption of Mercury Provisions was included in the Packet.

OTHER BUSINESS-OPERATIONAL

Agenda **Item 10** – Discussion: CASA Climate Change Program – Sarah Deslauriers gave a Presentation [LINK](#). She noted that California Climate Policy is driving changes at POTW's through several different regulations, legislation, and other initiatives. POTWs are viewed as both a potential source of fugitive climate pollutants such as methane, as well as a means to offset fossil fuels use by using excess digester capacity to produce biogas.

Agenda **Item 11** – Discussion: Update on Regional and Statewide Biosolids Issues –Greg Kester from CASA gave a presentation [LINK](#). Greg gave an overview of recent successes in countering

local ordinances forbidding land application and biosolids. He listed various pieces of legislation and regulations that will make biosolids application in landfills increasingly difficult or impossible over the new ten years.

Agenda **Item 12** – Discussion: Bay Area Regional Reliability Study Update – A [LINK](#) to the Technical Memorandum 2 was included in the Packet. The BACWA Representative to BARR gave an update. The Task Force is focused on developing projects related to inter-ties (moving water) and working on the inclusion of recycled water.

Agenda **Item 13** – Discussion: Update on Microplastics Research – Objective for Effluent Monitoring for Microplastic was included in the Packet. SFEI is working on a research effort that includes microplastics concentrations in wastewater effluent as well as studies on microplastics in the San Francisco Bay, and BACWA will help them recruit one addition POTW volunteer that is needed.

Agenda **Item 14** – Discussion: Executive Board Meeting Format – The Executive Director asked the Board, based on the length of previous Executive Board Meetings, if they are interested in extending the time for the meetings and including lunch. Because the meeting was already overtime, this item will be included on the May agenda.

REPORTS

Agenda **Item 15** – Committee Reports – BACWA Committee Reports were included in the Packet.

AIR Committee: A report from the March 15, 2017 meeting was included in the Packet.

BAPPG: A report from the April 5, 2017 meeting was included in the Packet.

Biosolids Committee: No meeting.

Collections Committee: A report from the March 23, 2017 meeting was included in the Packet.

InfoShare - Asset Management: No meeting.

InfoShare – Operations & Maintenance: No meeting.

Lab Committee: A Notice of Opportunity for Public Comment and Notice of Public Workshop from the SWRCB was included in the Packet. EBMUD provided an update on TNI, outlining the “asks.” They suggested that BACWA step in to make the requests at this point since the State Water Board seem to be going to TNI despite the problems that will threaten the viability of smaller labs. CASA indicated they may be interested in participating in commenting and suggested that BACWA contact them.

Permits Committee: A Report from the April 11, 2017 was included in the Packet.

Pretreatment Committee: No meeting.

Recycled Water Committee: No meeting.

Agenda **Item 16** - Discussion: Member Highlights - Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies. Non-principal members were also given an opportunity to report out on behalf of their agencies. No actions were taken on the report-outs.

EBDA: No report.

EBMUD: Eileen White joins the BACWA Executive Board as the new representative from EBMUD.

Central Contra Costa: No report.

San Francisco: No report.

San Jose: Long fin smelt spawn found in outlet.

Delta Diablo: Announced that Vince De Lange will be joining Delta Diablo as its General Manager.

Fairfield Suisun: No report.

Agenda **Item 17** - The **Executive Director's (ED) Report** for February 2017, along with the Board Calendar, and BACWA Action Items, were included in the Packet. It was noted that 96 of the 97 action items from FY16 and 50 of the 53 action items from FY17 have been completed.

Agenda **Item 18** - The **Regulatory Program Manager (RPM) Report** for February 2017 was included in the Packet.

Agenda **Item 19 - Other BACWA Representative Reports** – BACWA Representative were given an opportunity to provide updates. No actions were taken based on the reports.

- a. RMP-TRC: Rod Miller; Laura Pagano – No report.
- b. RMP Steering Committee: Karin North; Leah Walker; Jim Ervin – No report.
- c. **Summit Partners:** Dave Williams; Laura Pagano – No report.
- d. ASC/SFEI: Laura Pagano; Dave Williams; Karin North – No report.
- e. Nutrient Governance Steering Committee: Jim Ervin; Mike Connor – No report.
- f. **SWRCB Nutrient SAG:** Dave Williams – A [LINK](#) to the Index and a [LINK](#) to the Stakeholder Advisory on the SRWCB website were included in the Packet.
- g. SWRCB Focus Group – Bacterial Objectives: Lorien Fono; Amy Chastain – No report.
- h. SWRCB Focus Group – Mercury Amendments to the State Plan: Tim Potter; Dave Williams; Laura Pagano – No report.
- i. Nutrient Technical Workgroup: Eric Dunlavey – No report.
- j. NACWA Taskforce on Dental Amalgam: Tim Potter – No report.
- k. BAIRWMP: Cheryl Munoz, Linda Hu, Dave Williams – No report.
- l. NACWA Emerging Contaminants: Karin North, Melody La Bella – No report.
- m. CASA Statewide Pesticide Steering Committee: Melody La Bella – No report.
- n. CASA State Legislative Committee: Lori Schectel – No report.
- o. CASA Regulatory Workgroup – Lorien Fono - No report.

- p. RMP Microplastics Liaison: Nirmela Arsem – No report.
- q. ReNUWI: Mike Connor; Karin North – No report.
- r. AWT Certification Committee: Maura Bonnarens – No report.
- s. Bay Area Regional Reliability Project: Roger Bailey; Mike Connor – No report.
- t. WaterReuse Working Group: Cheryl Munoz – No report.

Agenda Item 20 - SUGGESTIONS FOR FUTURE AGENDA ITEMS.

No items were suggested.

Agenda Item 21 - ANNOUNCEMENTS:

The next regular meeting of the Board is scheduled for **May 19, 2017 from 9:00 am – 12:30 pm** at the **EBMUD Treatment Plant, Lab Library, 2020 Wake Ave., Oakland, CA**

To receive a copy of any materials provided to the Board at a BACWA Executive Board meeting contact Sherry Hull at shull@bacwa.org.

The meeting adjourned at 12:45 pm.



MONTHLY FINANCIAL SUMMARY REPORT March 2017

Fund Balances

In FY 16 BACWA had seven funds of which three were operating funds (BACWA, Legal, and CBC) and four were pass-through funds for which BACWA provided only contract administration services. Beginning in FY17, with the AIR Committee becoming a regular BACWA committee supported by BACWA dues, the balance from the Pass-through AIR Fund has been consolidated into the BACWA Fund. The remaining three pass-through funds are not of particular concern as these funds simply track expenses and revenues to ensure that receipts are adequate to pay all expected expenses.

BACWA Fund: This fund provides the resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on March 31, 2017 was \$1,352,625 which is significantly higher than the target reserve of \$160,000 which is intended to cover 3 months of normal operating expenses. \$269,073 of the ending fund balance is obligated to meet on-going operating line item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA staff support. This leaves an unobligated excess fund balance of \$1,083,552. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, these excess funds may be used to offset potential dues increases to the BACWA members.

CBC Fund: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on March 31, 2017 was \$1,680,838 which is significantly higher than the target reserve of \$400,000. However, \$325,753 of the ending balance is obligated to meet line item expenses for completion of the Optimization/Upgrade Studies contract, the Risk Reduction contracts, and for technical support. Total Disbursements for FY17 from the CBC Fund include the annual payment of \$880,000 to SFEI for the Nutrient Watershed Permit commitment. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, any excess CBC funds may be used to offset potential dues increases to the BACWA members.

Legal Fund: This fund provides for needed legal services. The ending balance was \$300,000 which is at the target reserve of \$300,000.

Budget To Actual

The BACWA Annual Budget includes all expected revenues as well as budgeted expenses. Transfers are made from the BACWA Fund and/or the CBC Fund to balance the Annual Budget if expenses exceed revenues and vice versa. It is therefore important to achieve the anticipated revenues and not exceed the budgeted expenses on an annual basis in order to maintain the BACWA and CBC Fund balances at the levels projected in the 5 Year Plan.

Revenues as of March 31, 2017 (75% of the FY) are at 112% primarily due to the payment of FY17 invoices by the Principal members and higher than budgeted interest earnings. Another major factor is the receipt of \$187,500 in voluntary contributions by some members to fund additional scientific investigations.



MONTHLY FINANCIAL SUMMARY REPORT March 2017

This revenue however will be offset with an FY 17 expense as the collected funds from the members need to be passed on to SFEI for conducting the scientific investigations.

Overall Expenses as of March 31, 2017 (75% of the FY) are at 94% and are tracking in accordance with the Annual Budget due to payment of Watershed Permit commitment early in the fiscal year. Individual expense categories with a plus or minus 10% variance at this point in the fiscal year are as follows:

Administration: This category is under-expended at 61% due primarily to the timing of invoices.

Meetings: This category is 91% expended at 75% of the FY due to a higher than expected expenditure on the Annual Meeting and inclusion of Executive Director expenses for Summit Partners and the CASA Annual Meeting under Miscellaneous Meetings.

Communications: This category is under-expended (i.e. 41%) due primarily to no expenditures on website changes and low expenditures on IT Support.

Legal Support: Budget of \$4,500 and expenditures to date of \$350 resulting in a favorable variance of \$4,150 due to a low need for legal administrative advice.

Committees: This category is under-expended (i.e. 59%) due primarily to timing of invoices.

Collaboratives: This category is under-expended (i.e. 43%) due to timing of invoices.

Tech Support: This category is 113% expended at 75% of the FY partly due to timing of the Watershed Permit Commitment invoice and to the payment of Optimization/Upgrade obligations. In addition, an expense was incurred for the voluntary contributions for FY 17 by some members for funding additional science however as mentioned above this is a pass-thru expense that will be negated by revenues over the two year period of contributions. The Opt/Upgrade expenditures were significantly below budget in FY16 and will, therefore, be significantly above budget in FY17.



BACWA
FY 2017 Budget
Approved 4/15/16

75% of Fiscal Year

| <u>BACWA FY17 BUDGET</u> | <u>Line Item Description</u> | <u>FY 2017 Budget</u> | <u>Actuals Mar 2017</u> | <u>Actual % of Budget Mar 2017</u> | <u>Variance</u> | <u>NOTES</u> |
|-------------------------------|-------------------------------------|-----------------------|-------------------------|------------------------------------|-------------------|--|
| REVENUES & FUNDING | | | | | | |
| Dues | Principals' Contributions | \$477,544 | \$477,545 | 100% | \$1 | FY17: 2% increase. |
| | Associate & Affiliate Contributions | \$175,072 | \$174,410 | 100% | -\$662 | FY17: approx. 2% increase. |
| Fees | Clean Bay Collaborative | \$675,000 | \$672,750 | 100% | -\$2,250 | Unchanged from FY16 |
| | Nutrient Surcharge | \$800,000 | \$800,133 | 100% | \$133 | Increased from \$600,000 in FY16 |
| | Voluntary Nutrient Contributions | \$0 | \$187,500 | | \$187,500 | FY17: Palo Alto (\$30k); Sunnyvale (\$60k) CCCSD (\$195k) FY18: Palo Alto (\$30k) |
| | Other | \$0 | \$67,650 | | \$67,650 | Passthrough for Pharm Study; est. carryforward to FY17: \$TBD (curr bal \$28,409) |
| Other Receipts | AIR Non-Member | \$6,350 | \$6,350 | 100% | \$0 | Approx. 2% increase. |
| | BAPPG Non-Members | \$3,700 | \$3,699 | 100% | -\$1 | Approx. 2% increase. |
| | Other | \$0 | \$13,698 | | \$13,698 | Transfer of AIR Fund to BACWA Fund (not included in total Revenues) |
| Fund Transfer | Special Program Admin Fees | \$2,500 | \$0 | 0% | -\$2,500 | Budgeted for WOT only. Continue to have Props into FY17. |
| Interest Income | Funds | \$4,000 | \$11,477 | 287% | \$7,477 | FY17: Actuals includes BACWA, Legal, & Nutrients Funds from LAIF |
| | Investments | \$0 | \$1,105 | | \$1,105 | Alternative Investments Interest |
| | Total Revenue | \$2,144,166 | \$2,402,619 | 112% | \$258,453 | |
| BACWA FY16 BUDGET | | | | | | |
| | <u>Line Item Description</u> | <u>FY 2017 Budget</u> | <u>Actuals Mar 2017</u> | <u>Actual % of Budget Mar 2017</u> | <u>Variance</u> | <u>NOTES</u> |
| EXPENSES | | | | | | |
| Labor | | | | | | |
| | Executive Director | \$189,370 | \$142,027 | 75% | -\$47,343 | 3.2% CPI (SF/Oakland/San Jose Metro Area Dec 2015) |
| | Assistant Executive Director | \$85,000 | \$62,082 | 73% | -\$22,918 | 8.08% increase - requested 8.2% |
| | Regulatory Program Manager | \$112,500 | \$70,290 | 62% | -\$42,210 | New contract for FY17 with L Fono |
| | Total | \$386,870 | \$274,399 | 71% | -\$112,471 | |
| Administration | | | | | | |
| | EBMUD Financial Services | \$40,000 | \$32,404 | 81% | -\$7,596 | \$3,070 is Audit Fee from FY16 when it was on same line item as Accounting. |
| | Auditing Services (Maze) | \$6,200 | -\$3,666 | -59% | -\$9,866 | FY17: a separate line item from EBMUD Financial Services. (-\$3,666=accrual from FY16) |
| | Administrative Expenses | \$7,500 | \$2,438 | 33% | -\$5,062 | Travel, Supplies, Parking, Mileage, Tolls, Misc. |
| | Insurance | \$4,500 | \$4,266 | 95% | -\$234 | |
| | Total | \$58,200 | \$35,442 | 61% | -\$22,758 | |
| Meetings | | | | | | |
| | EB Meetings | \$2,500 | \$1,104 | 44% | -\$1,396 | Catering, Venue, other expenses |
| | Annual Meeting | \$7,000 | \$7,127 | 102% | \$127 | Catering, Venue, other expenses |
| | Pardee | \$6,000 | \$4,421 | 74% | -\$1,579 | Catering, Venue, other expenses |
| | Misc. Meetings | \$1,100 | \$2,473 | 225% | \$1,373 | Holiday Lunch, Committee Chair Lunch, Staff Mtgs, Summit Partners, CASA Annual Meeting |
| | Total | \$16,600 | \$15,125 | 91% | -\$1,475 | |
| Communication | | | | | | |
| | Website Hosting (Computer Courage) | \$600 | \$600 | 100% | \$0 | |
| | File Storage (Box.net) | \$750 | \$720 | 96% | -\$30 | |
| | Website Development/Maintenance | \$1,200 | \$0 | 0% | -\$1,200 | Domains, website changes, Logo EPS file |
| | IT Support (As Needed) | \$2,600 | \$385 | 15% | -\$2,215 | |

| | | | | | | |
|-----------------------|---------------------------------------|--------------------|--------------------|-------------|-------------------|---|
| EXPENSES | | | | | | |
| | Other Communication (MS, SM & Code42) | \$800 | \$716 | 90% | -\$84 | MS Exchange, Survey Monkey, CrashPlanPro |
| | Total | \$5,950 | \$2,419 | 41% | -\$3,531 | |
| Legal | | | | | | |
| | Regulatory Support | \$2,500 | \$350 | 14% | -\$2,150 | |
| | Executive Board Support | \$2,000 | \$0 | 0% | -\$2,000 | |
| | Total | \$4,500 | \$350 | 8% | -\$4,150 | |
| Committees | | | | | | |
| | AIR | \$50,000 | \$26,087 | 52% | -\$23,913 | Full BACWA Committee beginning in FY17 |
| | BAPPG | \$86,000 | \$81,950 | 95% | -\$4,050 | Includes CPSC @ \$10,000, |
| | Biosolids Committee | \$3,100 | \$342 | 11% | -\$2,758 | |
| | Collections System | \$1,000 | \$300 | 30% | -\$700 | |
| | InfoShare Groups | \$1,200 | \$723 | 60% | -\$477 | funds for 2 workgroups (Asset Mgmt & O&M) |
| | Laboratory Committee | \$6,000 | \$2,641 | 44% | -\$3,359 | |
| | Permit Committee | \$1,000 | \$0 | 0% | -\$1,000 | |
| | Pretreatment | \$7,000 | \$84 | 1% | -\$6,916 | Request includes specific training sessions |
| | Recycled Water Committee | \$1,000 | \$0 | 0% | -\$1,000 | |
| | Misc Committee Support | \$35,000 | \$0 | 0% | -\$35,000 | |
| | Total | \$191,300 | \$112,127 | 59% | -\$79,173 | |
| Collaboratives | | | | | | |
| | Collaboratives | | | | | |
| | State of the Estuary (biennial) | \$20,000 | \$0 | 0% | -\$20,000 | Biennial in Odd Years |
| | Arleen Navarret Award | \$0 | \$0 | | \$0 | Biennial in Even Years |
| | FWQC (Fred Andes) | \$7,500 | \$7,500 | 100% | \$0 | Dues raised to \$7,500 in FY16 |
| | Stanford ERC (ReNUWit) | \$10,000 | \$10,000 | 100% | \$0 | |
| | CWCCG | \$0 | \$0 | | \$0 | State-wide function, being absorbed by CASA in FY17 |
| | Misc | \$3,000 | \$0 | 0% | -\$3,000 | new budget line item in recognition of unanticipated expenses |
| | Total | \$40,500 | \$17,500 | 43% | -\$23,000 | |
| Tech Support | Technical Support | | | | | |
| | Nutrients | | | | | |
| | Watershed | \$880,000 | \$880,000 | 100% | \$0 | |
| | Additional work under permit | \$50,000 | \$17,367 | 35% | -\$32,633 | FY17: Pilot. LimnoTech |
| | Opt/Upgrade/Annual Reporting Studies | \$18,128 | \$176,634 | 974% | \$158,506 | FY17: remainder of lump sum budget |
| | Nutrient Program Coordination | \$50,000 | \$0 | 0% | -\$50,000 | Prog Coord Pilot Study scheduled for FY17, started in April 2016 |
| | Voluntary Nutrient Contributions | \$0 | \$157,500 | | \$157,500 | FY17: Palo Alto (\$30k); Sunnyvale (\$30k) CCCSD (\$97,500k) |
| | General Tech Support | \$50,000 | \$0 | 0% | -\$50,000 | SFEI agrmt bal: \$28,409.12 expires 6/30/17. FY17: Assesmt Framework |
| | Chemicals of Concern | \$15,000 | \$2,500 | 17% | -\$12,500 | Pesticide Mgmt support (Kelly Moran-TDC) |
| | Risk Reduction | \$32,500 | \$4,548 | 14% | -\$27,952 | Remainder of Contracts executed for \$50k in FY16 to be paid over two years |
| | Total | \$1,095,628 | \$1,238,549 | 113% | \$142,921 | |
| | TOTAL EXPENSES | \$1,799,548 | \$1,695,911 | 94% | -\$103,637 | |
| | NET INCOME BEFORE TRANSFERS | \$344,618 | \$706,708 | | | |
| | TRANSFERS FROM RESERVES | \$0 | | | | |
| | NET INCOME AFTER TRANSFERS | \$344,618 | | | | |



Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

May 1, 2017

MEMO TO: Bay Area Clean Water Agencies Executive Board
MEMO FROM: D. Scott Klein, Controller, East Bay Municipal Utility District
SUBJECT: Eighth Month Treasurer's Report

As required by section eight of the Joint Powers Agreement establishing the Bay Area Clean Water Agencies (BACWA) and California Government Code Sections 6500 et seq., attached is the BACWA Treasurer's Report for the period covering **July 1, 2016 through March 31, 2017** (ninth months of Fiscal Year 2016-2017). This report covers expenditures, cash receipts, and cash transfers for the following BACWA funds:

- Bay Area Clean Water Agencies (BACWA),
- BACWA Legal Reserve Fund (Legal Rsrv),
- Water Quality Attainment Strategy (WQA CBC),
- Air Issues and Regulation Group (AIR),
- Water/Wastewater Operator Training (WOT),
- Prop84 Bay Area Integrated Regional Water Mgmt (PRP84),
- Prop50 Bay Area Integrated Regional Water Mgmt (PRP50)

BACWA Fund Report as of March 31, 2017

| BACWA FUND BALANCES - DATA PROVIDED BY ACCOUNTING DEPT. | | | | | | | |
|---|--------------------|--|---------------------------|-----------------------------------|------------------------------|-----------------------------|--|
| DEPTID | DESCRIPTION | FISCAL YEAR BEGINNING FUND BALANCE | TOTAL RECEIPTS TO-DATE | TOTAL DISBURSEMENTS TO-DATE | MONTH-ENDING FUND BALANCE | OUTSTANDING ENCUMBRANCES | MONTH-END UNOBLIGATED FUND BALANCE |
| 800 | BACWA | 1,060,239 | 749,747 | 457,361 | 1,352,625 | 269,073 | 1,083,552 |
| 804 | LEGAL RSRV | 300,000 | - | - | 300,000 | - | 300,000 |
| 805 | CBC | 1,252,817 | 1,666,570 | 1,238,549 | 1,680,838 | 325,753 | 1,355,086 |
| 802 | AIR | 13,698 | - | 13,698 | 0 | - | 0 |
| | SUBTOTAL 1 | 2,626,754 | 2,416,317 | 1,709,608 | 3,333,463 | 594,825 | 2,738,638 |
| 810 | WOT | 33,608 | 141,214 | 52,122 | 122,700 | - | 122,700 |
| | SUBTOTAL 2 | 33,608 | 141,214 | 52,122 | 122,700 | - | 122,700 |
| 811 | PRP84 | 118,356 | 902,287 | 757,978 | 262,665 | - | 262,665 |
| 815 | PRP50 | 150,663 | 558,049 | 532,617 | 176,096 | - | 176,096 |
| | SUBTOTAL 3 | 269,019 | 1,460,336 | 1,290,595 | 438,760 | - | 438,760 |
| | GRAND TOTAL | 2,929,381 | 4,017,867 | 3,052,324 | 3,894,924 | 594,825 | 3,300,099 |

Top Chart: Reflects CASH on the Books Includes Encumbrances
Bottom Chart: Reflects CASH in the Bank Includes Payables (bills received but not paid)
Allocations: Priority for non-liquid investments

| BACWA INVESTMENTS BALANCES - DATA PROVIDED BY TREASURY DEPT. | | | | | | | | | | | | | |
|--|--------------------|--|---------------------------|-----------------------------------|------------------------------|--|---|-----------------------------|--------------------------------|-----------------------------------|---------------------------------------|----------------------------|--------------------------------------|
| DEPTID | DESCRIPTION | FISCAL YEAR BEGINNING FUND BALANCE | TOTAL RECEIPTS TO-DATE | TOTAL DISBURSEMENTS TO-DATE | MONTH-ENDING FUND BALANCE | RECONCILIATION TO FINANCIAL STATEMENTS | MONTH-END RECONCILED FUND BALANCE | UNINVESTED CASH BALANCES | LAIF INVESTMENTS AMOUNTS | LAIF INVESTMENTS PERCENTAGE | ALTERNATIVE INVESTMENTS AMOUNTS | ALTERNATIVE INVESTMENTS | INVESTMENT INSTRUCTIONS AND NOTES |
| 800 | BACWA | 1,060,239 | 749,747 | 457,361 | 1,352,625 | 45,418 | 1,398,043 | - | 1,398,043 | 56% | (0) | 0% | priority # 3 for allocation |
| 804 | LEGAL RSRV | 300,000 | - | - | 300,000 | - | 300,000 | - | - | 0% | 300,000 | 33% | priority # 1 for allocation |
| 805 | CBC | 1,252,817 | 1,666,570 | 1,238,549 | 1,680,838 | - | 1,680,838 | - | 1,075,839 | 43% | 605,000 | 67% | priority # 2 for allocation |
| 802 | AIR | 13,698 | - | 13,698 | 0 | - | 0 | - | - | 0% | 0 | 0% | This fund is gone |
| | SUBTOTAL 1 | 2,626,754 | 2,416,317 | 1,709,608 | 3,333,463 | 45,418 | 3,378,881 | - | 2,473,881 | 98% | 905,000 | 100% | |
| 810 | WOT | 33,608 | 141,214 | 52,122 | 122,700 | - | 122,700 | 122,700 | - | 0% | - | 0% | pass-through funds, no allocation |
| | SUBTOTAL 2 | 33,608 | 141,214 | 52,122 | 122,700 | - | 122,700 | 122,700 | - | 0% | - | 0% | |
| 811 | PRP84 | 118,356 | 902,287 | 757,978 | 262,665 | - | 262,665 | 262,665 | - | 0% | - | 0% | pass-through funds, no allocation |
| 815 | PRP50 | 150,663 | 558,049 | 532,617 | 176,096 | - | 176,096 | 176,096 | - | 0% | - | 0% | pass-through funds, no allocation |
| | SUBTOTAL 3 | 269,019 | 1,460,336 | 1,290,595 | 438,760 | - | 438,760 | 438,760 | - | 0% | - | 0% | |
| | GRAND TOTAL | 2,929,381 | 4,017,867 | 3,052,324 | 3,894,924 | 45,418 | 3,940,342 | 561,461 | 2,512,600 | | 905,000 | 100% | |
| | | | | | | verification | (38,719) | - | 38,719 | | - | - | |

To be used to cover Reconciliation to Financial Statements (\$45,418)

Reconciliation to Trial Balance - accrual basis

Per Report above:

| | |
|-----------------|------------------|
| General | 2,416,317 |
| WOT | 141,214 |
| PROP | 1,460,336 |
| subtotal | 4,017,867 |

Billings-Pending Receipts

| | | |
|-----------------|-----------------|------------------|
| 4686 | Mem Contrib | (116,250) |
| 4687 | Transfer | - |
| 4690 | Assoc Contrib | 2,440 |
| 4696 | Other | 73,698 |
| 4731 | State Grant | (8,747) |
| 4732 | Grant Retention | (435,188) |
| subtotal | | (484,048) |

Trial Balance Revenue Accounts

| | | |
|-----------------|-----------------|--------------------|
| 4411 | Interest | (13,825) |
| 4686 | Mem Contrib | (1,223,045) |
| 4687 | Transfer | - |
| 4690 | Assoc Contrib | (176,850) |
| 4696 | Other | (1,091,030) |
| 4731 | State Grant | (907,300) |
| 4732 | Grant Retention | (108,072) |
| subtotal | | (3,520,122) |

Difference **13,698** Transfer of AIR Fund balance to BACWA at beginning of FY17

CHECK ON BACWA LIQUIDITY THRESHOLD

| | <u>Mar</u> | <u>Apr</u> | <u>May</u> | <u>Jun</u> | <u>Jul</u> | <u>Aug</u> | <u>Sep</u> | <u>Oct</u> | <u>Nov</u> | <u>Dec</u> | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Total FY 17</u> | <u>Total FY 18</u> |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| BEGINNING UNOBLIGATED FUND BALANCE | \$3,333,463 | \$3,256,834 | \$3,180,205 | \$3,103,576 | \$3,026,947 | \$2,908,559 | \$2,285,913 | \$2,743,267 | \$3,200,621 | \$3,657,975 | \$3,539,587 | \$3,421,198 | \$3,302,810 | | |
| Average Monthly Revenues | \$0 | \$0 | \$0 | \$0 | \$0 | \$575,742 | \$575,742 | \$575,742 | \$575,742 | \$0 | \$0 | \$0 | \$0 | \$2,144,165 | \$2,302,969 |
| Average Monthly Expenditures (Less Large one time Expenses) | (\$76,629) | (\$76,629) | (\$76,629) | (\$76,629) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | (\$118,388) | \$919,548 | \$1,420,659 |
| Less Large Expenditures | \$0 | \$0 | \$0 | \$0 | \$0 | (\$1,080,000) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | | |
| NET AVAILABLE FOR INVESTMENT | \$3,256,834 | \$3,180,205 | \$3,103,576 | \$3,026,947 | \$2,908,559 | \$2,285,913 | \$2,743,267 | \$3,200,621 | \$3,657,975 | \$3,539,587 | \$3,421,198 | \$3,302,810 | \$3,184,422 | | |
| NEW INVESTMENTS | | | | | | | | | | | | | | | |
| Higher Yield (non-liquid) | (\$905,000) | (\$905,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | (\$605,000) | | |
| MATURITIES | | | | | | | | | | | | | | | |
| Higher Yield (non-liquid) | \$0 | \$300,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | | |
| AVAILABLE LIQUID FUNDS | \$2,351,834 | \$2,575,205 | \$2,498,576 | \$2,421,947 | \$2,303,559 | \$1,680,913 | \$2,138,267 | \$2,595,621 | \$3,052,975 | \$2,934,587 | \$2,816,198 | \$2,697,810 | \$2,579,422 | | |
| TARGET AVAILABLE LIQUID FUNDS | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | \$1,500,000 ok | | |

BACWA Revenue Report as of March 31, 2017

(99,000)

(99,000)

99,000

| FUND # | DEPARTMENT | JOB | REVENUE TYPE | AMENDED BUDGET | CURRENT PERIOD | | | YEAR TO DATE | | | | UNOBLIGATED |
|----------------------|------------|---------|----------------------------------|------------------|-----------------|---------------|-----------------------------|-----------------|------------------|-----------------------------|------------------|------------------|
| | | | | | Admin & General | Contributons | Interest, Transfers, Others | Admin & General | Contributons | Interest, Transfers, Others | ACTUAL | |
| 800 | BACWA | 1011099 | Principal's Contributions | 477,544 | - | - | - | - | 477,545 | - | 477,545 | (1) |
| 800 | BACWA | 1011133 | Assoc. & Affiliate Contr | 175,072 | - | 9,555 | - | - | 174,410 | - | 174,410 | 662 |
| 800 | BACWA | 0408511 | Administrative & General | - | - | - | - | - | - | (369) | (369) | 369 |
| 800 | BACWA | 1014251 | Non-Member Contributions (BAPPG) | 3,700 | - | - | - | - | 3,699 | - | 3,699 | 1 |
| 800 | BACWA | 1011109 | Fund Transfers | 2,500 | - | - | - | - | - | - | - | 2,500 |
| 800 | BACWA | 1011117 | BDO Interest Income | 4,000 | - | - | - | - | - | 6,764 | 6,764 | (2,764) |
| 800 | BACWA | 1011108 | BDO Other Receipts | - | - | - | - | - | - | 13,698 | 13,698 | (13,698) |
| 800 | BACWA | 1014252 | BDO Non-Member Contr AIR | 6,350 | - | - | - | - | 6,350 | - | 6,350 | - |
| 800 | BACWA | 1014511 | BDO-Alternative Investment Inc | - | - | - | - | 1,105 | - | (1,105) | - | - |
| 800 | BACWA | 1014550 | BDO-Other Receipts (PHARM) | - | - | - | - | - | 67,650 | - | 67,650 | (67,650) |
| BACWA TOTAL | | | | 669,166 | - | 9,555 | - | 1,105 | 729,654 | 18,988 | 749,747 | (80,581) |
| 804 | LEGAL | 1011117 | Interest Income | - | - | - | - | - | - | - | - | - |
| LEGAL TOTAL | | | | - | - | - | - | - | - | - | - | - |
| 805 | WQA-CBC | 1011099 | BDO Member Contributions | 675,000 | - | 13,168 | - | - | 732,750 | (60,000) | 672,750 | 2,250 |
| 805 | WQA-CBC | 1011108 | BDO Other Receipts | 800,000 | - | 18,670 | - | - | 800,133 | - | 800,133 | (133) |
| 805 | WQA-CBC | 1011117 | BDO Interest Income | - | - | - | - | - | - | 6,187 | 6,187 | (6,187) |
| 805 | WQA-CBC | 1014528 | BDO-Voluntary Nutrient Contrib | - | - | - | - | - | 127,500 | 60,000 | 187,500 | (187,500) |
| WQA CBC TOTAL | | | | 1,475,000 | - | 31,838 | - | - | 1,660,383 | 6,187 | 1,666,570 | (191,570) |
| TOTAL | | | | 2,144,166 | - | 41,393 | - | 1,105 | 2,390,037 | 25,175 | 2,416,317 | (272,151) |

| | DEPARTMENT | JOB | REVENUE TYPE | AMENDED BUDGET | CURRENT PERIOD | | | YEAR TO DATE | | | | UNOBLIGATED |
|------------------|------------|---------|--------------------------|----------------|-----------------|--------------|-----------------------------|-----------------|----------------|-----------------------------|----------------|------------------|
| | | | | | Admin & General | Contributons | Interest, Transfers, Others | Admin & General | Contributons | Interest, Transfers, Others | ACTUAL | |
| 810 | WOT | 1011099 | BDO Member Contributions | - | - | - | - | - | 129,000 | - | 129,000 | (129,000) |
| 810 | WOT | 1011108 | BDO Other Receipts | - | - | - | - | - | 12,000 | - | 12,000 | (12,000) |
| 810 | WOT | 1011117 | BDO Interest Income | - | - | - | - | - | - | 214 | 214 | (214) |
| WOT TOTAL | | | | - | - | - | - | - | 141,000 | 214 | 141,214 | (141,214) |

| | DEPARTMENT | JOB | REVENUE TYPE | AMENDED BUDGET | CURRENT PERIOD | | | YEAR TO DATE | | | | UNOBLIGATED |
|-------------------|------------|-----|--------------|----------------|-----------------|----------------|-----------------------------|-----------------|------------------|-----------------------------|------------------|--------------------|
| | | | | | Admin & General | Contributons | Interest, Transfers, Others | Admin & General | Contributons | Interest, Transfers, Others | ACTUAL | |
| 811 | PROP 84 | | | - | - | 611,765 | - | - | 901,808 | 479 | 902,287 | (902,287) |
| 815 | PROP 50 | | | - | - | - | - | - | 557,500 | 549 | 558,049 | (558,049) |
| PROP TOTAL | | | | - | - | 611,765 | - | - | 1,459,308 | 1,029 | 1,460,336 | (1,460,336) |

| | | | | | | | | | | | | |
|--------------------|--|--|--|------------------|---|----------------|---|--------------|------------------|---------------|------------------|--------------------|
| Grand Total | | | | 2,144,166 | - | 653,158 | - | 1,105 | 3,990,345 | 26,418 | 4,017,867 | (1,873,701) |
|--------------------|--|--|--|------------------|---|----------------|---|--------------|------------------|---------------|------------------|--------------------|

BACWA Expense Detail Report as of March 31, 2017

| EXPENSE TYPE | JOB | AMENDED BUDGET | CURRENT PERIOD | | | | YEAR TO DATE | | | | OBLIGATED | UNOBLIGATED |
|--------------------------------|---------|----------------|----------------|--------|--------|----|--------------|---------|-----------|---------|-----------|-------------|
| | | | ENC | PV | DA | JV | ENC | PV | DA | JV | | |
| LABOR | | | | | | | | | | | | |
| AS-Executive Director | 1011123 | 189,370 | (31,562) | 31,562 | - | - | 47,343 | 142,027 | - | - | 189,370 | - |
| AS-Assistant Executive Directo | 1011124 | 85,000 | (7,480) | 7,480 | - | - | 22,918 | 62,082 | - | - | 85,000 | - |
| AS-Regulatory Program Manager | 1011149 | 112,500 | (8,865) | 8,865 | - | - | 42,210 | 70,290 | - | - | 112,500 | - |
| ADMINISTRATION | | | | | | | | | | | | |
| AS-EBMUD Financial Services | 1011125 | 40,000 | (5,509) | 5,509 | - | - | 11,262 | 28,738 | 3,666 | (3,666) | 40,000 | - |
| AS-Audit Services | 1014512 | 6,200 | - | - | - | - | 6,200 | - | - | - | 6,200 | - |
| AS-BACWA Admin Expense | 1011118 | 7,500 | - | - | 130 | - | - | - | 2,438 | - | 2,438 | 5,062 |
| AS-Insurance | 1011126 | 4,500 | - | - | - | - | - | - | 4,266 | - | 4,266 | 234 |
| MEETINGS | | | | | | | | | | | | |
| GBS-Meeting Support-Exec Bd | 1014513 | 2,500 | (126) | 126 | - | - | 494 | 506 | 598 | - | 1,598 | 902 |
| GBS-Meeting Support-Annual | 1014514 | 7,000 | - | - | - | - | - | - | 7,127 | - | 7,127 | (127) |
| GBS-Meeting Support-Pardee | 1014515 | 6,000 | - | - | - | - | - | - | 4,421 | - | 4,421 | 1,579 |
| GBS-Meeting Support-Misc | 1014516 | 1,100 | - | - | - | - | - | - | 2,473 | - | 2,473 | (1,373) |
| GBS- Meeting Support | 1011122 | - | - | - | - | - | - | - | - | - | - | - |
| COMMUNICATION | | | | | | | | | | | | |
| CAR-BACWA Website Hosting | 1014517 | 600 | - | - | - | - | - | - | 600 | - | 600 | - |
| CAR-BACWA File Storage | 1014518 | 750 | - | - | - | - | - | - | 720 | - | 720 | 30 |
| CAR-BACWA IT Support | 1014519 | 2,600 | (135) | 135 | - | - | 2,218 | 383 | - | - | 2,600 | - |
| CAR-BACWA IT Software | 1014520 | 800 | - | - | 74 | - | - | - | 716 | - | 716 | 84 |
| CAR-BACWA Website Development/ | 1011116 | 1,200 | - | - | - | - | - | - | - | - | - | 1,200 |
| LEGAL | | | | | | | | | | | | |
| LS-Regulatory Support | 1011107 | 2,500 | - | - | - | - | 2,150 | 350 | - | - | 2,500 | - |
| LS-Executive Board Support | 1011110 | 2,000 | - | - | - | - | 2,000 | - | - | - | 2,000 | - |
| COMMITTEES | | | | | | | | | | | | |
| AIR-Air Issues&Regulation Grp | 1011109 | - | - | - | - | - | - | - | - | - | - | - |
| AIR-Air Issues&Regulation Grp | 1014253 | 50,000 | (873) | 873 | 209 | - | 24,623 | 25,377 | 709 | - | 50,709 | (709) |
| BC-BAPPG | 1011147 | 86,000 | (1,472) | 1,472 | - | - | 14,050 | 58,450 | 23,500 | - | 96,000 | (10,000) |
| BC-Biosolids Committee | 1011101 | 3,100 | - | - | - | - | - | - | 342 | - | 342 | 2,758 |
| BC-Collections System | 1011097 | 1,000 | - | - | - | - | - | - | 300 | - | 300 | 700 |
| BC-InfoShare Groups | 1011102 | 1,200 | - | - | - | - | - | - | 723 | - | 723 | 477 |
| BC-Laboratory Committee | 1011103 | 6,000 | - | - | 571 | - | - | - | 2,641 | - | 2,641 | 3,359 |
| BC-Permit Committee | 1011098 | 1,000 | - | - | - | - | - | - | - | - | - | 1,000 |
| BC-Pretreatment Committee | 1011146 | 7,000 | - | - | - | - | - | - | 84 | - | 84 | 6,916 |
| BC-Water Recycling Committee | 1011100 | 1,000 | - | - | - | - | - | - | - | - | - | 1,000 |
| BC-Miscellaneous Committee Sup | 1011104 | 35,000 | - | - | - | - | 25,956 | - | - | - | 25,956 | 9,044 |
| COLLABORATIVES | | | | | | | | | | | | |
| CAS-Arleen Navaret Award | 1012201 | - | - | - | - | - | - | - | - | - | - | - |
| CAS-FWQC | 1012202 | 7,500 | - | - | - | - | - | - | 7,500 | - | 7,500 | - |
| CAS-Stanford ERC | 1011969 | 10,000 | - | - | 10,000 | - | - | - | 10,000 | - | 10,000 | - |
| CAS-CWCCG | 1011148 | - | - | - | - | - | - | - | - | - | - | - |
| CAS-PSSEP | 1011112 | 20,000 | - | - | - | - | - | - | - | - | - | 20,000 |
| CAS-Misc Collaborative Sup | 1014521 | 3,000 | - | - | - | - | - | - | - | - | - | 3,000 |
| BDO-Contract Expenses (PHARM) | | | | | | | | | | | | |
| BDO-Contract Expenses (PHARM) | 1014551 | - | - | - | - | - | 67,650 | - | - | - | 67,650 | (67,650) |
| BACWA TOTAL | | 703,920 | (56,022) | 56,022 | 10,984 | - | 269,073 | 388,203 | 72,824 | (3,666) | 726,434 | (22,514) |
| TECH SUPPORT | | | | | | | | | | | | |
| WQA-CE Addl Work Under Permit | 1014254 | 50,000 | - | - | - | - | 57,000 | 12,367 | 5,000 | - | 74,367 | (24,367) |
| WQA-CE-Technical Support | 1011127 | 50,000 | - | - | - | - | 28,409 | - | - | - | 28,409 | 21,591 |
| WQA-CE CASA Chem of Concern | 1011128 | 15,000 | - | - | - | - | - | 2,500 | - | - | 2,500 | 12,500 |
| WQA-CE Opt-Upgrade Studies | 1014255 | 18,128 | - | - | - | - | 213,792 | 176,634 | - | - | 390,426 | (372,298) |
| WQA-CE Risk Reduction | 1014023 | 32,500 | - | - | - | - | 26,552 | 4,548 | - | - | 31,099 | 1,401 |
| WQA-CE-Nutrient WS Permit Comm | 1014021 | 880,000 | - | - | - | - | - | - | 880,000 | - | 880,000 | - |
| WQA-CE-Program Mgmt | 1011131 | 50,000 | - | - | - | - | - | - | - | - | - | 50,000 |
| WQA-CE Voluntary Nutr Contrib | 1014529 | - | - | - | - | - | - | - | 157,500 | - | 157,500 | (157,500) |
| TECH SUPPORT (CBC) TOTAL | | 1,095,628 | - | - | - | - | 325,753 | 196,049 | 1,042,500 | - | 1,564,301 | (468,673) |
| GRAND TOTAL | | 1,799,548 | (56,022) | 56,022 | 10,984 | - | 594,825 | 584,252 | 1,115,324 | (3,666) | 2,290,735 | (491,187) |
| | | | | | | | | TOTAL | 1,695,910 | | | |
| WOT | | | | | | | | | | | | |
| Administrative Support | 1011142 | - | - | - | - | - | - | - | - | - | - | - |
| BDO Contract Expenses | 1011143 | - | - | - | 10,400 | - | - | - | 52,122 | - | 52,122 | (52,122) |
| | | - | - | - | 10,400 | - | - | - | 52,122 | - | 52,122 | (52,122) |

PROPOSITIONS Revenue Report as of March 31, 2017

| DEPTID | DEPARTMENT | JOB | REVENUE TYPE | AMENDED BUDGET | CURRENT PERIOD | | | YEAR TO DATE | | | | UNOBLIGATED |
|----------------------|--------------------------------|---------|--------------------------------|----------------|-----------------|----------------|-----------------------------|-----------------|------------------|-----------------------------|------------------|--------------------|
| | | | | | Admin & General | Contributons | Interest, Transfers, Others | Admin & General | Contributons | Interest, Transfers, Others | ACTUAL | |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1011117 | BDO Interest Income | - | - | - | - | - | - | 479 | 479 | (479) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1011142 | Administrative Support | - | - | 1,348 | - | - | 31,348 | - | 31,348 | (31,348) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1011691 | Water Efficient Landscape Reba | - | - | 191,983 | - | - | 191,983 | - | 191,983 | (191,983) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1011705 | Regional Green Infrastructure | - | - | 36,087 | - | - | 72,778 | - | 72,778 | (72,778) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012209 | Water Efficient LRP | - | - | 33,180 | - | - | 33,180 | - | 33,180 | (33,180) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012210 | Bay Friendly Landscape TP | - | - | 10,613 | - | - | 10,613 | - | 10,613 | (10,613) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012211 | Weather Based Irrigation Cntrl | - | - | 4,766 | - | - | 4,766 | - | 4,766 | (4,766) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012212 | High Efficiency Toilet & UR | - | - | 76,089 | - | - | 163,008 | - | 163,008 | (163,008) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012213 | High Efficiency Toilet & UI | - | - | 51,481 | - | - | 94,681 | - | 94,681 | (94,681) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012214 | High Efficiency Clothes Washrs | - | - | 83,014 | - | - | 83,014 | - | 83,014 | (83,014) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012215 | Napa Co. Rainwater HP | - | - | 4,683 | - | - | 11,490 | - | 11,490 | (11,490) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012216 | Conservation Program Admin | - | - | 16,207 | - | - | 30,980 | - | 30,980 | (30,980) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012219 | Flood Infrastructure Mapping T | - | - | 35,959 | - | - | 89,902 | - | 89,902 | (89,902) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012220 | Stormwater Improvements & PBP | - | - | 1,033 | - | - | 1,033 | - | 1,033 | (1,033) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012221 | Richmond Shoreline & San PFP | - | - | 2,268 | - | - | 2,268 | - | 2,268 | (2,268) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012222 | Pescadero Integrated FRAH | - | - | 10,453 | - | - | 10,453 | - | 10,453 | (10,453) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012223 | Restoration Guidance, San FC | - | - | 4,664 | - | - | 12,733 | - | 12,733 | (12,733) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012224 | SF Estuary Steelhead MP | - | - | 43,785 | - | - | 50,725 | - | 50,725 | (50,725) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | 1012225 | Watershed Program Admnstrtn | - | - | 4,151 | - | - | 6,852 | - | 6,852 | (6,852) |
| PROP 84 TOTAL | | | | - | - | 611,765 | - | - | 901,808 | 479 | 902,287 | (902,287) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | 1011117 | BDO Interest Income | - | - | - | - | - | - | 549 | 549 | (549) |
| | Prop50BayAreaIntegRegnlWtrMgmt | 1011142 | Administrative Support | - | - | - | - | - | 23,753 | - | 23,753 | (23,753) |
| | Prop50BayAreaIntegRegnlWtrMgmt | 1011542 | EBMUD Ca. Waterstar Initiative | - | - | - | - | - | 525,000 | - | 525,000 | (525,000) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | 1011543 | EBMUD New Biz Guidebook | - | - | - | - | - | 8,747 | - | 8,747 | (8,747) |
| PROP50 TOTAL | | | | - | - | - | - | - | 557,500 | 549 | 558,049 | (558,049) |
| GRAND TOTAL | | | | - | - | 611,765 | - | - | 1,459,308 | 1,029 | 1,460,336 | (1,460,336) |

PROPOSITIONS Expense Detail Report as of March 31, 2017

| DEPTID | DEPARTMENT | EXPENSE TYPE | AMENDED BUDGET | CURRENT PERIOD | | | | YEAR TO DATE | | | | OBLIGATED | UNOBLIGATED |
|---------------------------------------|--------------------------------|--------------------------------|----------------|----------------|----|----------------|----|--------------|----|------------------|----|------------------|--------------------|
| | | | | ENC | PV | DA | JV | ENC | PV | DA | JV | | |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | BDO Fund Transfers | - | - | - | - | - | - | - | - | - | - | - |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Administrative Support | - | - | - | - | - | - | - | 53,033 | - | 53,033 | (53,033) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | BDO Contract Expenses | - | - | - | - | - | - | - | 14 | - | 14 | (14) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Regional Green Infrastructure | - | - | - | - | - | - | - | 36,691 | - | 36,691 | (36,691) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Water Efficient LRP | - | - | - | 42,854 | - | - | - | 42,854 | - | 42,854 | (42,854) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Bay Friendly Landscape TP | - | - | - | 11,512 | - | - | - | 11,512 | - | 11,512 | (11,512) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Weather Based Irrigation Cntrl | - | - | - | 9,041 | - | - | - | 9,041 | - | 9,041 | (9,041) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | High Efficiency Toilet & UR | - | - | - | 186,321 | - | - | - | 186,321 | - | 186,321 | (186,321) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | High Efficiency Toilet & UI | - | - | - | 149,160 | - | - | - | 149,160 | - | 149,160 | (149,160) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | High Efficiency Clothes Washrs | - | - | - | 158,145 | - | - | - | 158,145 | - | 158,145 | (158,145) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Napa Co. Rainwater HP | - | - | - | 5,473 | - | - | - | 12,279 | - | 12,279 | (12,279) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Conservation Program Admin | - | - | - | 13,856 | - | - | - | 27,273 | - | 27,273 | (27,273) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Flood Infrastructure Mapping T | - | - | - | - | - | - | - | 53,943 | - | 53,943 | (53,943) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Stormwater Improvements & PBP | - | - | - | - | - | - | - | - | - | - | - |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Richmond Shoreline & San PFP | - | - | - | - | - | - | - | - | - | - | - |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Pescadero Integrated FRAH | - | - | - | - | - | - | - | - | - | - | - |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Restoration Guidance, San FC | - | - | - | - | - | - | - | 8,069 | - | 8,069 | (8,069) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | SF Estuary Steelhead MP | - | - | - | - | - | - | - | 6,941 | - | 6,941 | (6,941) |
| 811 | Prop84BayAreaIntegRegnlWtrMgmt | Watershed Program Admnstrtn | - | - | - | - | - | - | - | 2,701 | - | 2,701 | (2,701) |
| PRP84 TOTAL | | | - | - | - | 576,363 | - | - | - | 757,978 | - | 757,978 | (757,978) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | BDO Fund Transfers | - | - | - | - | - | - | - | - | - | - | - |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | Administrative Support | - | - | - | - | - | - | - | 102 | - | 102 | (102) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | BDO Contract Expenses | - | - | - | - | - | - | - | 14 | - | 14 | (14) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | EBMUD New Biz Guidebook | - | - | - | - | - | - | - | 7,500 | - | 7,500 | (7,500) |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | South Bay Advanced Regional RW | - | - | - | - | - | - | - | - | - | - | - |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | Pacifica RWP | - | - | - | - | - | - | - | - | - | - | - |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | Direct Install HET | - | - | - | - | - | - | - | - | - | - | - |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | Sonoma - Napa Marsh RWP | - | - | - | - | - | - | - | - | - | - | - |
| 815 | Prop50BayAreaIntegRegnlWtrMgmt | EBMUD Ca. Waterstar Initiative | - | - | - | - | - | - | - | 525,000 | - | 525,000 | (525,000) |
| PRP50 TOTAL | | | - | - | - | - | - | - | - | 532,617 | - | 532,617 | (532,617) |
| GRAND TOTAL (PROP 84 & 50) | | | - | - | - | 576,363 | - | - | - | 1,290,595 | - | 1,290,595 | (1,290,595) |



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 3

FILE NO.: 18-01

MEETING DATE: May 19, 2017

TITLE: Nomination and Election of BACWA Executive Board Chair and Vice Chair

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Board nomination and election of the BACWA Executive Board Chair and Vice Chair.

SUMMARY

Section 7 of the Joint Powers Agreement establishing BACWA states that the agency shall designate a Chair and Vice Chair, chosen by the Executive Board, from the members of the Executive Board. These positions each have a one year term that coincides with BACWA's fiscal year. Historically, most BACWA Chairs and Vice Chairs are asked to serve for two consecutive terms.

Responsibilities of the Chair include signing contracts, approving payments, convening and presiding over Executive Board meetings, and serving on the BACWA Finance Committee. Responsibilities of the Vice Chair include serving as the Chair in the absence of the regularly elected Chair and serving on the BACWA Finance Committee.

BACWA Leadership History

Timeframe

2000 – 2002

2002 – 2004

2004 – Feb. 2005

March 2005 – July 2005

July 2005 – June 2006

July 2006 – May 2007

June 2007 – June 2008

July 2008 – March 2010

April 2010 – June 2010

July 2010 – October 2010

Nov. 2010 – Feb. 2013

March 2013 – June 2015

July 2015 – June 2017

Chair

Chuck Weir (EBDA)

Jim Kelly (CCCSD)

Michael Carlin (SFPUC)

Dave Williams (EBMUD)

Bill Keaney (SFPUC)

Bill Keaney (SFPUC)

Dave Williams (EBMUD)

Dave Tucker (SJ)

Dave Tucker (SJ)

Arleen Navarret (SFPUC)

Ben Horenstein (EBMUD)

Mike Connor (EBDA)

Laura Pagano (SFPUC)

Vice-Chair

Jim Kelly (CCCSD)

Michael Carlin (SFPUC)

Dave Williams (EBMUD)

Bill Keaney (SFPUC) Chuck Weir (EBDA)

Dave Williams (EBMUD)

Dave Tucker (EBMUD)

Doug Craig (CCCSD)

Arleen Navarret (SFPUC)

Ben Horenstein (EBMUD)

Tommy Moala/Laura Pagano (SFPUC)

Laura Pagano (SFPUC)

Jim Ervin (SJ)

FISCAL IMPACT

This action has no fiscal impact.

ALTERNATIVES

This action does not require consideration of alternatives.



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 4

FILE NO.: 18-02

MEETING DATE: May 19, 2017

TITLE: BACWA FY 18 Committee Leadership and Representatives

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Confirm the appointment of BACWA Committee Leaders and Representatives for FY18.

SUMMARY

BACWA accomplishes much of its mission through the hard work and efforts of its volunteers. As the governing body of the BACWA organization, the Board can demonstrate its support of the individuals who volunteer to lead committee activities or represent BACWA in a variety of local, regional, state and national initiatives by confirming the appointment of these individuals to their respective positions within the BACWA organization. The BACWA Committees have submitted proposed leadership names for FY18. Additionally, BACWA Members serve on nineteen other committees and groups as BACWA Representatives. By confirming these appointments, the leadership and representation for BACWA for FY 18 will be officially established.

FISCAL IMPACT

This action has no fiscal impact.

ALTERNATIVES

This action does not require consideration of alternatives.

Attachment: FY18 Succession Plan

Approved:

Date:

Laura Pagano, Chair
BACWA

**BAY AREA CLEAN WATER AGENCIES
SUCCESSION PLANNING
Fiscal Year 2018**

A. BACWA Principal Representation

| Agency | Representative | Title & Roles |
|------------------|------------------------------------|--|
| EBMUD | Eileen White | |
| | Jacqueline Zipkin (Alternate) | |
| | Maura Bonnarens (Alternate) | AWT Certification Committee Representative |
| SFPUC | Laura Pagano | BACWA, Ad Hoc Conflict of Interest Committee Joint ASC/SFEI, Board Representative Summit Partners Representative |
| | Tommy Moala (Alternate) | |
| | Lori Regler (Alternate) | |
| | Amy Chastain (Alternate) | SWRCB Focus Group-Bacterial Objectives Nutrient Strategy Team Alternate |
| City of San Jose | Jim Ervin | Joint ASC/SFEI, Board Alternate RMP Steering Committee Nutrient Governance Steering Committee |
| | Amit Mutsuddy (Alternate) | |
| EBDA | Mike Conner | BACWA, Ad Hoc Conflict of Interest Committee BARR Board Alternate ReNUWIt Industrial Advisory Committee Member |
| | David Stoops, EBDA (Alternate) | Co-Chair, Info Share Ops/Maint Committee |
| | Jason Warner, Oro Loma (Alternate) | |
| CCCSD | Lori Schectel | CASA State Legislative Committee Nutrient Strategy Team Alternate |
| | Jean-Marc Petit (Alternate) | |
| | Roger Bailey (Alternate) | BARR Board Representative |

Changes to Principal Representation require submission of a Statement of Economic Interest Form within 30 days

B. Other BACWA Representation

| Agency | Representative | Notes |
|--|---|---|
| RMP Technical Committee | Rod Miller, SFPUC | |
| RMP Steering Committee | Karin North, Palo Alto; Leah Walker, Petaluma; Jim Ervin, City of San Jose | ASC Board Alternate, NACWA Emerging Contaminants, ReNUWIt Co-Chair, Recycled Water Comm. BACWA, Vice-Chair |
| Summit Partners | Dave Williams; Laura Pagano, SFPUC | BACWA Executive Director BACWA, Chair |
| Joint SFEI/ASC Board | Laura Pagano, SFPUC; Dave Williams | BACWA Executive Director |
| | Jim Ervin, City of San Jose, ASC Board Alternate Karin North, Palo Alto, ASC Board Alternate | One seat on loan from BACWA to Regional San Prabhakar Somaverapu |
| Nutrient Governance Steering Committee | Jim Ervin, City of San Jose; Mike Connor, EBDA | BACWA Board Representative BACWA Board Representative |
| SWRCB Nutrient SAG | Dave Williams | BACWA Executive Director |
| SWRCB Focus Group – Bacterial Objectives | Lorien Fono, BACWA; Amy Chastain, SFPUC | BACWA Regulatory Program Manager BACWA Board Alternate |
| SWRCB Focus Group – Mercury Amendments to the State Plan | Tim Potter, CCCSD; Dave Williams, BACWA; Laura Pagano, SFPUC | Co-Chair, Pretreatment Committee BACWA Executive Director |
| Nutrient Technical Workgroup | Eric Dunlavey, City of San Jose | |
| NACWA Taskforce on Dental Amalgam | Tim Potter, CCCSD | Co-Chair, Pretreatment Committee |
| BAIRWMP | Cheryl Munoz, SFPUC; Linda Hu, EBMUD; Dave Williams, BACWA | WateReuse Working Group BACWA Executive Director |
| NACWA Emerging Contaminants | Karin North, Palo Alto; Melody LaBella, CCCSD | RMP Steering Committee, ASC Board Alternate, ReNUWIt |
| CASA Statewide Pesticide Steering Committee | Melody LaBella, CCCSD | |
| CASA State Legislative Committee | Lori Schectel, CCCSD | BACWA Board Representative Nutrient Strategy Team Alternate |
| CASA Regulatory Workgroup | Lorien Fono, BACWA | BACWA Regulatory Program Manager |
| ReNUWIt | Mike Connor, EBDA; Karin North, Palo Alto | BACWA Board Representative ASC Board Alternate, RMP Steering Committee |
| RMP Microplastics Liaison | Nirmela Arsem, EBMUD | |
| AWT Certification Committee | Maura Bonnarens, EBMUD | BACWA Board Alternate |
| Bay Area Regional Reliability Project | Roger Bailey, CCCSD; Mike Connor, EBDA | BACWA Board Rep to BARR, BACWA Board Alternate BARR Alternate, BACWA Board Representative |
| WateReuse Working Group | Cheryl Munoz, SFPUC | BAIRWMP |

C. BACWA Committees

| Committee | Chair | Vice/Co-Chair | Comments |
|-------------------------|--------------------------------------|--|---|
| AIR | Nohemy Revilla, SFPUC, Co-Chair | Randy Schmidt, CCCSD, Co-Chair | Unchanged: Confirmed for FY18 Represents BACWA on CWCCG. |
| BAPPG | Doug Dattawalker, Union San | Simret Yigzaw, City of San Jose Joanne Le, City of Richmond | Changes: Confirmed for FY18 |
| Biosolids | Alicia Chakrabarti, EBMUD, Chair | Ravi Krishnaiah, SFPUC, Vice-Chair | Unchanged: Confirmed for FY18 |
| Collection Systems | Justin Waples, CCCSD | Erin Smith, City of Alameda, Vice-Chair | Will decide on succession after May 25 meeting |
| Info Share Ops/Maint | David Stoops, EBDA, Co-Chair | Joaquin Gonzalez, Delta Diablo, Co-Chair | Will change for FY18, tbd |
| InfoShare Asset Mgmt | Dana Lawson, CCCSD Co-Chair | Dillon Cowan, EBMUD Co-Chair | Unchanged: Confirmed for FY18 |
| Laboratory | Nirmela Arsem, EBMUD, Chair | Noel Enoki, San Jose, Vice- Chair | Unchanged: Confirmed for FY18 |
| Permits | Chris Dembiczak, EBMUD Vice-Chair | Robert Wilson, City of Petaluma | Changes: Confirmed for FY18 |
| Pretreatment | Tim Potter, CCCSD Co-Chair | Michael Dunning, Union San, Co-Chair | Unchanged: Confirmed for FY18 |
| Recycled Water | Rhodora Biagtan, DSRSD, Co-Chair | Leah Walker, City of Petaluma, Co-Chair | Unchanged: Confirmed for FY18 RMP Steering Committee Coordinates with IRWMP |



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 5

FILE NO.: 18-03

MEETING DATE: May 19, 2017

TITLE: Request Executive Board Approval to Increase the Agreement with Stephanie Hughes, ChE P.E. by \$2,000 for BAPPG Support

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Authorize an Amendment to the agreement with Stephanie Hughes, ChE P.E., dated June 17, 2016 to increase the agreement in an amount not to exceed \$2,000 for FY17.

SUMMARY

This increase to the agreement will provide support in responding to the Department of Pesticide Regulation (DPR) for the human health impacts from pet flea and tick control spot-on products. The increase in funding will support Stephanie Hughes in writing comment letters needed by the end of the fiscal year. The additional funding is needed since DPR has delayed the announcement of the health impacts report and anticipates announcing near the end of the current fiscal year or early into the next fiscal year. In following regulatory actions by DPR and the delays in the announcement, the original budget has now been expended before the end of the fiscal year and needs additional funding to provide the same level of support for BAPPG.

These efforts will be carried out under the supervision of Melody LaBella of Central Contra Costa Sanitary District.

FISCAL IMPACT

Funds are available for this agreement within the BAPPG FY17 Budget approved April 15, 2016, under Unplanned Issues.

ALTERNATIVES

1. Do not complete this work. This alternative is not recommended since this work will continue the current efforts for the pesticide campaign in preparation of the announcement from the DPR.
2. Select another consultant to conduct the work. This alternative is not recommended since the selected consultant has unique expertise in the subject area desired for supporting BACWA. In addition to having past wastewater agency experience in the Bay Area, Ms. Hughes offers a unique background that allows her to offer her these services to BAPPG at a very competitive rate as a sole proprietor. BAPPG is not aware of any other firm that has the breadth and expertise to offer both

professional training services and comment letter support at a very competitive rate. In addition, Ms. Hughes' work with the professional trades has been so well received that she now regularly receives requests from various Bay Area groups to provide this BACWA training to help ensure that all wastewater discharges are able to meet their permit limits.

Attachments: Amendment to FY17 Agreement with Stephanie Hughes
FY17 Agreement with Stephanie Hughes

Approved: _____
Laura Pagano, Chair,
BACWA Executive Board

Date: _____

**AMENDMENT
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES AND
Stephanie Hughes
FOR
BAPPG Support**

This Amendment is made this 19th day of May, 2017, in the City of Oakland, County of Alameda, State of California, to that certain agreement of July 5, 2016 by and between Stephanie Hughes and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Stephanie Hughes agree to an increase of \$2,000.00 for a total contract amount not to exceed \$17,000.00
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____
Laura Pagano, Chair, Executive Board

Date May 19, 2017

Stephanie Hughes

By _____

Date May 19, 2017



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 4b

FILE NO.: 17-12

MEETING DATE: June 17, 2016

TITLE: Request for BACWA Executive Board Approval to Execute Agreement with Stephanie Hughes, ChE P.E. for BAPPG Support

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Authorize the execution of an agreement with Stephanie Hughes, ChE P.E., to provide professional training, prepare comment letters and provide policy support in an amount not to exceed \$15,000 for FY17.

SUMMARY

This agreement will provide support for training to professional groups (dental hygienists/assistants, plumbers and/or plumbing apprentices) on mercury, copper and other relevant pollutants of concern to BACWA agencies, prepare comment letters, evaluate regulatory documents and perform research related to controlling pollutants at their source, and provide policy support on pesticides, pharmaceuticals, and other pollutants of emerging concern.

These efforts will be carried out under the supervision of John Mukhar and Karin North of the City of Palo Alto.

FISCAL IMPACT


Funds are available for this agreement and have been allocated for this project within the BAPPG FY17 approved April 15, 2016.

ALTERNATIVES

1. Do not complete this work. This alternative is not recommended since this work was included in BAPPG's approved FY17 budget and will assist BACWA with executing effective outreach messages and search for new opportunities to inspire behavior change in target groups.
2. Select another consultant to conduct the work. This alternative is not recommended since the selected consultant has unique expertise in the subject area desired for supporting BACWA. In addition to having past wastewater agency experience in the Bay Area, Ms. Hughes offers a unique background that allows her to offer her these services to BAPPG at a very competitive rate as a sole proprietor. BAPPG is not aware of any other firm that has the breadth and expertise to offer both professional training services and comment letter support at a very competitive rate. In addition, Ms.

Hughes' work with the professional trades has been so well received that she now regularly receives requests from various Bay Area groups to provide this BACWA training to help ensure that all wastewater discharges are able to meet their permit limits.

Attachments: FY17 Agreement with Stephanie Hughes
Stephanie Hughes' Scope of Work

Approved: 

Laura Pagano, Chair,
BACWA Executive Board

Date: June 17, 2016

BAY AREA CLEAN WATER AGENCIES
CONSULTING AGREEMENT

TO: Stephanie Hughes, ChE P.E. steifehughes@yahoo.com
1445 Emory Street
San Jose, CA 95126

FROM: David Williams, Executive Director dwilliams@bacwa.org
BACWA Phone: 925-765-9616
PO Box 24055, MS702 FAX: (510) 287-1351
Oakland, CA 94623

RE: BACWA Agreement for FY17 with Stephanie Hughes, ChE P.E., to provide to provide professional training (mercury and copper), prepare comment letters and provide policy support (pesticides, pharmaceuticals, etc.).

This Agreement covers professional services to be performed Stephanie Hughes, ChE P.E. in order to provide support for training to professional groups (dental hygienists/assistants, plumbers and/or plumbing apprentices) on mercury, copper and other relevant pollutants of concern to BACWA agencies, prepare comment letters, evaluate regulatory documents and perform research related to controlling pollutants at their source, and provide policy support on pesticides, pharmaceuticals, and other pollutants of emerging concern. These efforts will be carried out under the supervision of John Mukhar and Karin North of the City of Palo Alto. The total cost of professional services to be performed by Stephanie Hughes, ChE P.E. is not to exceed \$15,000. This contract will be funded by the BACWA Budget under the BAPPG Committee line item.

This Agreement may be terminated by either party at any time for convenience with 30 day notice. In the event of termination by BACWA, BACWA shall pay Stephanie Hughes, ChE P.E. for professional and competent services rendered to the date of termination upon delivery of assigned work products to BACWA.


Stephanie Hughes, ChE P.E. shall submit invoices to the BACWA Assistant Executive Director via e-mail along with approval by BAPPG. Invoices shall indicate hours associated with each task. Invoices will be paid within thirty (30) days of receipt.

BACWA AED E-mail: Sherry Hull shulll@bacwa.org

Approved:

By _____
Laura Pagano
Chair, BACWA Executive Board

Date July 5, 2016

By 
Stephanie Hughes, ChE P.E.

Date 7/5/2016

BACWA EIN: 94-3389334



STEPHANIE HUGHES, ChE P.E.
 Consulting Engineer / University Lecturer
 1445 Emory Street, San Jose, California 95126

**BAPPG: Professional Training
 and Policy/Regulatory Support**

Scope of Work and Cost Estimate

DATE: 2-Jun-2016

| SCOPE OF WORK DESCRIPTION | BUDGET | | TOTAL |
|--|-----------------------|--------------|--------------------|
| | Rate: \$180.00 ODC | Hour Est | |
| TASK 1. Professional training: Conduct outreach to professionals, by reaching out to community colleges, union shops, and professional develop and training workshops. The focus is expected to be on dental mercury and other dental office wastes, but consultant should have the expertise and experience to also provide trainings regarding proper pharmaceutical disposal, hazardous material identification during building demolition, and copper plumbing BMPs. As part of this effort, consultant shall update contact database, communicate with contacts, and seek speaking engagements. Edit/update presentations as warranted per new regulatory context. This scope assumes up to a total of 15 presentations. | \$510 | 50.5 | \$9,090.00 |
| Task 2. Policy Support and Comment Letters: Consultant will be on-call to develop regulatory letters, conduct literature reviews, or provide other technical support. Topics could include, but are not limited to, metals, pesticides, nutrients, salinity, and emerging constituents (such as PBDEs and PFOS) being reviewed by the Regional Board. | | 24.0 | \$4,830.00 |
| Task 3. Administrative: Prepare relevant outreach sections to the BAPPG Semi-Annual Reports in January and July to be submitted to the BACWA Board of Directors. Speak at one BAPPG meeting to provide significant updates of a technical nature (e.g. flea IPM or new dental requirements). | | 6.00 | \$1,080.00 |
| Totals | \$510 | 80.50 | \$15,000.00 |

www.stephaniehughes.net



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 6a, 6b, 6c

FILE NO.: 18-04, 18-05, 18-06

MEETING DATE: May 19, 2017

TITLE: Approval of Fiscal Year 2018 Amendments to Contracts

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Authorize the approval of amendments to contracts to implement the Fiscal Year 2018 BACWA/CBC Budget and Workplan.

SUMMARY

The BACWA Fiscal Year 2018 begins July 1, 2017. In order to prevent a gap in core services, BACWA typically executes contracts for the coming FY before the end of June. The amendments summarized below will ensure that, as of July 1, 2017 BACWA has Executive Director (ED), Assistant Executive Director (AED), and Regulatory Program Manager services. All of these contracts were included in the BACWA FY 2018 workplan and budget and will become effective July 1, 2017. All contracts have a term of one year and will terminate on June 30, 2018.

| Contractor | Services | Contract Amount | File Number |
|-----------------------------------|---------------------------------------|-----------------|-------------|
| a. DRW Engineering (Amendment #3) | Executive Director Services | \$195,998.00 | 18-04 |
| b. Sherry Hull (Amendment #2) | Assistant Executive Director Services | \$87,975.00 | 18-05 |
| c. Lorien Fono (Amendment #1) | Regulatory Program Manager Services | \$116,438.00 | 18-06 |

FISCAL IMPACT

The funding for these contracts is consistent with the FY 2018 Workplan and Budget for BACWA/CBC.

ALTERNATIVES

No other alternatives were considered for these contracts as the terms of these agreements are consistent with BACWA contracting policies.

Attachments:

1. DRW Engineering Amendment #3
2. Sherry Hull Amendment #2
3. Lorien Fono Amendment #1

Approved:

Date:

Laura Pagano, Chair
BACWA

**AMENDMENT NO. 3
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES AND
David R. Williams (dba DRW Engineering)
FOR
Executive Director Services**

This Amendment No. 3 is made this 19th day of May, 2017, in the City of Oakland, County of Alameda, State of California, to that certain agreement of July 1, 2014 by and between David R. Williams (dba DRW Engineering) and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and DRW Engineering agree to a new contract amount of \$195,998.00 for Executive Director Services.
2. BACWA and DRW Engineering agree to a new period of July 1, 2017 – June 30, 2018.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Date May 19, 2017
Laura Pagano, Chair, Executive Board

David R. Williams (dba DRW Engineering)

By _____ Date May 19, 2017

**AMENDMENT NO. 2
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES AND
Sherry A. Hull
FOR
Assistant Executive Director Services**

This Amendment No. 2 is made this 19th day of May, 2017, in the City of Oakland, County of Alameda, State of California, to that certain agreement of July 1, 2015 by and between Sherry A Hull and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Sherry A. Hull agree to a new contract amount of \$87,975.00 for Assistant Executive Director Services.
2. BACWA and Sherry A. Hull agree to a new period of July 1, 2017 – June 30, 2018.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Date May 19, 2017
Laura Pagano, Chair, Executive Board

Sherry A. Hull

By _____ Date May 19, 2017

**AMENDMENT NO. 1
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES AND
Lorien Fono
FOR
Regulatory Program Manager Services**

This Amendment No. 1 is made this 19th day of May, 2017, in the City of Oakland, County of Alameda, State of California, to that certain agreement of July 1, 2016 by and between Lorien Fono and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and DRW Engineering agree to a new contract amount of \$116,438.00 for Regulatory Program Manager Services.
2. BACWA and Lorien Fono agree to a new period of July 1, 2017 – June 30, 2018.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____
Laura Pagano, Chair, Executive Board

Date May 19, 2017

Lorien Fono

By _____

Date May 19, 2017



EXECUTIVE DIRECTOR AUTHORIZATION REQUEST

AGENDA NO: 7.a

FILE NO.: 18-07

DATE: May 19, 2017

TITLE: Executive Director Authorization for Agreement with Downey Brand, LLP for Regulatory Legal Support in FY18

RECOMMENDED ACTION

BACWA Executive Director authorization for an agreement with Downey Brand, LLP., in an amount not to exceed \$2,550, to provide regulatory legal counsel for the period of July 1, 2017 – June 30, 2018.

SUMMARY

The Fiscal Year 2018 BACWA budget, approved by the BACWA Executive Board on April 15, 2017, included a \$2,550 line item for regulatory legal counsel services.

This agreement with Downey Brand would provide as needed regulatory legal support for BACWA for FY18.

FISCAL IMPACT

For FY18, \$2,550 of the total contract value will be funded by the Regulatory Legal line item in the approved FY18 BACWA budget.

ALTERNATIVES

No other alternatives were considered as this action is consistent with BACWA contracting policies.

Attachments:

1. Downey Brand Scope of Work
2. Downey Brand Rate Sheet

Approved: _____

David R. Williams
David R. Williams,
BACWA Executive Director

Date: May 8, 2017

EXHIBIT A

SCOPE OF

WORK

Professional Services by
Downey Brand LLP
Fiscal Year 2018

Downey Brand LLP agrees to provide legal advice and counsel to BACWA upon written request by the BACWA Executive Director or the Assistant Executive Director, the total costs of which are **not to exceed \$2,550.**

Exhibit B

Downey Brand LLP

2017-2018 Hourly Rates for
BACWA

| | |
|------------------|--|
| Melissa Thorne | \$380 (discounted from standard rate) |
| Nicole Granquist | \$380 (discounted from standard rate) |
| Associates | \$230-345 (depending on associate's years of experience) |

Costs

Transportation, Parking, Lodging, Tolls (for approved travel) - actual cost per receipt
For large copy jobs, regular BW copies - \$0.10 per page; color copies - \$0.20 per page
Postage/Overnight mail service - actual cost
Mileage: current IRS rule rate
Courier: actual cost per receipt
Duplication to CD/DVD: \$5.00 per CD/DVD



EXECUTIVE BOARD CHAIR AUTHORIZATION REQUEST

AGENDA NO: 7.b

FILE NO.: 18-08

DATE: May 19, 2017

TITLE: Executive Director Authorization for Agreement with Day Carter Murphy for Executive Board Legal Support in FY18

ACTION

Executive Director Authorization to execute an agreement with Day Carter Murphy LLP in an amount not to exceed \$2,050.00 to continue to provide as needed legal counsel to BACWA during the period of July 1, 2017 – June 30, 2018.

SUMMARY

This contract will allow Day Carter Murphy to continue to provide legal support on an as needed basis, upon request from the BACWA Executive Board, Executive Director and/or Assistant Executive Director.

FISCAL IMPACT

This project is included in the approved Fiscal Year 2018 Budget and Workplan and funds are available.

ALTERNATIVES

No other alternatives were considered as this action is consistent with BACWA contracting policies

Attachments:

1. Scope for DCM
2. Rate Sheet for DCM

Approved: David R. Williams
David R. Williams,
BACWA Executive Director

Date: May 8, 2017

EXHIBIT A

SCOPE OF WORK

Professional Services by
Day Carter & Murphy LLP
Fiscal Year 2017-18

Day Carter & Murphy LLP agrees to provide legal advice and counsel to BACWA upon written request by the BACWA Executive Director or the Assistant Executive Director, the total annual costs of which are **not to exceed \$2,050.**

EXHIBIT B

HOURLY RATES/REIMBURSABLE EXPENSES

Day Carter Murphy

FY 2017-18

| | |
|------------------|-------------------|
| James M. Day Jr. | \$340.00 per hour |
| Ralph R. Nevis | \$320.00 per hour |
| Joshua L. Baker | \$320.00 per hour |



EXECUTIVE DIRECTOR AUTHORIZATION

AGENDA ITEM NO.: 7-c

FILE NO.: 18-09

DATE: May 19, 2017

TITLE: Executive Director Authorization for Amendment #2 to Agreement with Cayuga Information Systems for IT Support in FY18

ACTION

Executive Director Authorization to execute Amendment #2 to an agreement with Cayuga Information Systems, in an amount not to exceed \$2,600.00, to continue to provide as needed IT Services to BACWA during the period of July 1, 2017 through June 30, 2018.

SUMMARY

This Amendment to the Agreement dated July 9, 2015 will allow Cayuga Information Systems to continue to provide IT support on an as needed basis, upon request from the BACWA Executive Director, Regulatory Program Manager, and/or Assistant Executive Director.

FISCAL IMPACT

This project is included in the approved Fiscal Year 2018 Budget and Workplan and funds are available.

ALTERNATIVES

No other alternatives were considered as this action is consistent with BACWA contracting policies

Attachments:

1. Amendment
2. Scope & Rates

Approved: David R. Williams
David R. Williams, P.E.
BACWA Executive Director

Date: May 8, 2017

**AMENDMENT NO. 2
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES AND
Cayuga Information Systems
FOR
IT Services**

This Amendment No. 1 is made this th day of May, 2017, in the City of Oakland, County of Alameda, State of California, to that certain agreement of July 9, 2015 by and between Cayuga Information Systems and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Cayuga Information Systems agree to a new not to exceed amount of \$2,600.00 for IT Services.
2. BACWA and Cayuga Information Systems agree to a new period of July 1, 2017 – June 30, 2018.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By David R. Williams
David R. Williams, Executive Director

Date _____

Cayuga Information Systems

By _____
Larry Tubbs

Date _____

CAYUGA INFORMATION SYSTEMS

Attachment A

FY17 SCOPE

Task 1. Provide As-Needed IT Assistance to BACWA Staff.

Attachment B

FY18 Rates and Terms of Payment

- Hourly Rate: \$90.00 for onsite or over the phone assistance.
- One hour minimum for field service calls.
- Travel Time: No charge for travel within 45 minutes of Martinez Office.
- Expenses: Reimbursed for actual expenses.

BACWA Optimization/Upgrade Workshop No. 2

June 7, 2017

EBMUD Training Resource Center

10:30 am – 1:30 pm

Agenda

- I. Welcome and Introduction 10:30 AM**
- II. Optimization/Upgrade Preliminary Findings 10:35 AM**
 - A. Brief Intro (5 minutes):
 - a) Nutrient Watershed Permit Background
 - b) Project Approach and Current Status
 - c) Purpose of Report
 - B. Case Study 1
 - a) Case 1
 - a. Optimization
 - b. Sidestream
 - c. Level 2 Upgrades
 - d. Level 3 Upgrades
 - b) Case 2
 - a. Optimization
 - b. Sidestream
 - c. Level 2 Upgrades
 - d. Level 3 Upgrades
 - c) Compare and Contrast
 - C. Draft Findings, Cost and Load Reduction Results
 - a) Optimization
 - b) Sidestream
 - c) Level 2
 - d) Level 3
 - e) No Net Load Increase
 - f) Complete Summary of Initial Results
- III. Lunch Break 11:45 PM**
- IV. Continuation 12:15 PM**
 - A. Observations on Trends / Findings
 - a) Role of Averaging Periods
 - b) Plant Sizing – Treating all the Flow
 - c) Space Constraints
 - d) Emerging Technologies
 - e) Nitrogen vs. Phosphorus

- f) Greenhouse Gas Emissions
- B. Summary of Recycled Water and CIP Data Request
- C. Sea Level Rise
- D. Next Steps
- E. Q/A

- V. Update on 2nd Watershed Permit 12:30 PM**

- VI. Optional Presentation(s) 1:15 PM**
 - A. Nereda
 - B. DC Water Optimization Case Study
 - C. Denmark Education Exchange

- VII. Adjourn 1:30 PM**

Sherry Hull

From: Sherry Hull
Sent: Tuesday, May 16, 2017 9:51 AM
To: Sherry Hull
Subject: FW: agenda item # 8.a.ii - 2nd WS Permit Update
Attachments: Letter to POTWs on 2nd WS Permit.docx; Agency Nutrient Surcharge for \$1Mk in excess reserves.pdf; LaypersonsNutrientPresentation.pptx

BACWA Member name, I am reaching out individually to all of the BACWA members with the note below. Please reply, thanks.

Your facility's wastewater treatment plant is included in the 1st Nutrient Watershed (WS) Permit which expires in 2019. A significant amount of effort on the part of a cross-section of BACWA members has gone into developing the key terms of the 2nd Nutrient Watershed Permit for 2019 that we believe would be acceptable to all of the BACWA members included in the 1st Watershed Permit. Due to several aspects of the proposed terms of the 2nd Watershed Permit, BACWA is reaching out to our members now in order to get a preliminary indication of whether or not your agency plans on being included in the 2nd Watershed Permit. An indication now does not mean you are committed to participate in the 2nd WS permit, it is merely your intent at this time. Attached to this email is a brief White Paper that describes where we are on the development of a 2nd Watershed Permit as well as a spreadsheet that shows the Nutrient Surcharge costs for your agency if you participate in the 2nd Watershed Permit. Also attached is a PowerPoint presentation that BACWA is providing to its members in for use in updating their governing boards if so desired.

BACWA has a Workshop for all of our members on June 7th to provide an update on the Optimization/Upgrade studies and it would be helpful to have an indication of member's preliminary indication of participating in the 2nd Watershed Permit by the date of the Workshop, so if you could respond to me before June 7th that would be greatly appreciated. Feel free to call or email me if you have any questions.

David R. Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)
Cell: 925-765-9616
Email: dwilliams@bacwa.org

INTRODUCTION

The first Nutrient Watershed Permit was a regional permit issue in 2014 by the San Francisco Regional Water Quality Control Board (Water Board). All 37 POTWs that discharge to the Bay, including your agency, is covered by the permit. BACWA is playing a key role in meeting the terms of the Permit on behalf of its members. The 2nd Nutrient Watershed Permit will be issued in 2019. A team, consisting of a cross-section of POTW representative, has been working to negotiate with the Water Board a permit that will be acceptable to the BACWA membership. The purpose of this email is to ask if your agency would support the key terms for the 2nd Permit that have been discussed with the Water Board and appear to have their concurrence. BACWA is now checking with each BACWA member to get a preliminary indication as to how many of the 37 POTWs would chose to enter into the 2nd Permit.

1ST NUTRIENT WATERSHED PERMIT TERMS AND STATUS

It took approximately 18 months to negotiate the terms of the 1st Watershed (WS) Permit. When finalized, all 37 POTWs that discharge to San Francisco Bay elected to be covered by the 1st WS Permit versus negotiating their own separate permit with the Water Board. There are costs associated with meeting the requirements of the 1st WS Permit but, due to economies of scale, these costs were significantly less under a regional WS permit than if each agency had negotiated their own permit with the Water Board.

The key terms of the 1st WS Permit were as follows:

1. Individual POTW monitoring for nutrients (responsibility of each plant)
2. Group Annual Trend Report (prepared by BACWA)
3. Annual Progress Reports on meeting the terms of the Permit (prepared by BACWA)
4. Optimization/Upgrade Study for each plant (prepared by BACWA)
5. Funding the Nutrient Management Strategy Science Program at \$880,000/yr. (funds, referred to as the Nutrient Surcharge, collected from each agency by BACWA based on their total nitrogen loading to the Bay)

All requirements of the WS Permit are being met. There will be a BACWA membership meeting on June 7th to update the membership on the progress of the Optimization/Upgrade studies.

2ND WATERSHED PERMIT DISCUSSIONS

Recognizing that there will be a 2nd WS Permit issued in 2019, the Water Board has stated their intent of what would be included in the 2nd Permit. They have stated that provision #1, #2, and #3 listed above will be in the 2nd Permit. The Science Program being managed by a group of very talented PhD's at the San Francisco Estuary Institute is progressing but it is significantly underfunded and therefore it is anticipated that the Water Board would want to see, as a requirement in the 2nd WS Permit, at least the same level of science funding from the BACWA membership but probably more. The Water Board also stated their intent to include "load caps" in the 2nd WS Permit. The "load caps" would limit future

increases in nutrient loadings from POTWs and therefore would require reductions in current loading if any growth was projected in a POTW's service area.

The intent to include a "load cap" provision in the 2nd WS Permit caused considerable concern amongst the BACWA membership as plants envisioned having to undergo significant costs to begin reducing nutrients. As an alternative to "load caps" the BACWA negotiating team suggested that since the Science Program was underfunded and since the science should drive any nutrient regulations, didn't it make more sense that, in lieu of "load caps", more funds should be applied to the Science Program to better understand if the Bay is heading towards impairment due to nutrients. The Water Board considered this alternative to the "load caps" provision and agreed that with substantially more funding for the science, which would serve to answer questions regarding impairment earlier, that they would be willing to not include "load caps" in the 2nd WS Permit. But as a caveat they also indicated that they would like to see BACWA make some voluntary increases in the science funding for the last two remaining years in the 1st WS Permit (i.e. FY 18 and FY 19), plus further the understanding of what non-grey scape (i.e. concrete structures) options there were for future reductions in nutrient loadings to the Bay such as use of recycling or wetlands that could have other benefits besides just reducing nutrient loadings.

2nd WATERSHED PERMIT PROPOSAL

After many meetings and discussions with the Water Board, a proposal for the key terms of the 2nd WS Permit has been developed. The key proposed terms for the 2nd WS Permit are as follows:

1. Same as above
2. Same as above
3. Same as above
4. Conduct a regional study on non-grey scape alternative for nutrient reductions (prepared by BACWA)
5. Funding the Nutrient Management Strategy Science Program starting in 2020 at 2.5 x \$880,000/yr. (funds, referred to as the Nutrient Surcharge, collected from each agency by BACWA based on their total nitrogen loading to the Bay)
6. Voluntarily increase funding for the Science Program by \$200,000 in each of FY18 and FY19 (paid by BACWA).

COSTS TO INDIVIDUAL AGENCIES

Funds to pay for all of the requirements in the 1st WS Permit were assessed to individual BACWA members via a Nutrient Surcharge line item that was listed on each member's annual dues invoice. The Nutrient Surcharge supplemented the long standing Clean Bay Collaborative (CBC) fee that has been assessed to the BACWA members for many years and is used to undertake scientific and regulatory investigations of interest to the BACWA members such as the development of rational TMDLs. In order to pay for all of the six items listed above for the 2nd WS Permit, the Nutrient Surcharge would need to be increased (note: the CBC fee has been flat for many years and will remain flat). Attachment A shows

the BACWA member's Nutrient Surcharge for the current FY (i.e. FY 17) plus what the Nutrient Surcharge for your agency would be in FY 18, 19 and FY 20-24 (the 5 yr. term of the 2nd WS Permit).

If you chose not to be a party to the 2nd WS Permit, the Water Board indicated they would negotiate separately with your agency and utilize their authority under the California Water Code section 13267 which gives the Water Board the authority to require individual agencies to investigate the quality of any waters of the state within its region.

A few agencies have indicated an interest in undertaking early actions to reduce nutrients. To the extent an agency wants to get recognition in the 2nd WS Permit for any early action the issues associated with commitment to the implementation of the early action, specified reduction of nutrients, continuation of the activity for years to come, etc. would need to be worked out on a case -by -case basis with the Water Board.

| | 1ST WATERSHED PERMIT | | | | 2ND WATERSHED PERMIT* | | | | |
|---|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| BACWA Agency | Current Nutrient Surcharge FY 17 | FY 18 Nutrient Surcharge | FY 19 Nutrient Surcharge | FY 20 Nutrient Surcharge | FY 21 Nutrient Surcharge | FY 22 Nutrient Surcharge | FY 23 Nutrient Surcharge | FY 24 Nutrient Surcharge | |
| CCCSD | \$106,667 | \$106,667 | \$106,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | |
| EBDA | \$106,667 | \$106,667 | \$106,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | |
| EBMUD | \$106,667 | \$106,667 | \$106,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | |
| San Jose | \$106,667 | \$106,667 | \$106,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | |
| SFPUC Southeast | \$106,667 | \$106,667 | \$106,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | \$226,667 | |
| American Canyon | \$1,155 | \$1,155 | \$1,155 | \$2,455 | \$2,455 | \$2,455 | \$2,455 | \$2,455 | |
| Benicia | \$3,677 | \$3,677 | \$3,677 | \$7,813 | \$7,813 | \$7,813 | \$7,813 | \$7,813 | |
| Burlingame | \$7,262 | \$7,262 | \$7,262 | \$15,431 | \$15,431 | \$15,431 | \$15,431 | \$15,431 | |
| CMSA | \$15,505 | \$15,505 | \$15,505 | \$32,948 | \$32,948 | \$32,948 | \$32,948 | \$32,948 | |
| Crockett (Port Costa) | \$26 | \$26 | \$26 | \$55 | \$55 | \$55 | \$55 | \$55 | |
| Delta Diablo | \$25,565 | \$25,565 | \$25,565 | \$54,325 | \$54,325 | \$54,325 | \$54,325 | \$54,325 | |
| FSSD | \$20,787 | \$20,787 | \$20,787 | \$44,172 | \$44,172 | \$44,172 | \$44,172 | \$44,172 | |
| Las Gallinas ^(b) | \$1,952 | \$1,952 | \$1,952 | \$4,149 | \$4,149 | \$4,149 | \$4,149 | \$4,149 | |
| MSD 5 (Tiburon & Paradise Cove) | \$1,074 | \$1,074 | \$1,074 | \$2,282 | \$2,282 | \$2,282 | \$2,282 | \$2,282 | |
| Millbrae | \$4,339 | \$4,339 | \$4,339 | \$9,219 | \$9,219 | \$9,219 | \$9,219 | \$9,219 | |
| Mt. View | \$2,055 | \$2,055 | \$2,055 | \$4,368 | \$4,368 | \$4,368 | \$4,368 | \$4,368 | |
| Napa SD | \$3,433 | \$3,433 | \$3,433 | \$7,295 | \$7,295 | \$7,295 | \$7,295 | \$7,295 | |
| Novato SD | \$2,636 | \$2,636 | \$2,636 | \$5,601 | \$5,601 | \$5,601 | \$5,601 | \$5,601 | |
| Palo Alto | \$36,802 | \$36,802 | \$36,802 | \$78,203 | \$78,203 | \$78,203 | \$78,203 | \$78,203 | |
| Petaluma | \$683 | \$683 | \$683 | \$1,452 | \$1,452 | \$1,452 | \$1,452 | \$1,452 | |
| Pinole | \$5,320 | \$5,320 | \$5,320 | \$11,305 | \$11,305 | \$11,305 | \$11,305 | \$11,305 | |
| Rodeo SD | \$607 | \$607 | \$607 | \$1,291 | \$1,291 | \$1,291 | \$1,291 | \$1,291 | |
| SFO Airport | \$3,384 | \$3,384 | \$3,384 | \$7,191 | \$7,191 | \$7,191 | \$7,191 | \$7,191 | |
| San Mateo | \$25,657 | \$25,657 | \$25,657 | \$54,521 | \$54,521 | \$54,521 | \$54,521 | \$54,521 | |
| Sausalito-Marin City SD | \$2,283 | \$2,283 | \$2,283 | \$4,852 | \$4,852 | \$4,852 | \$4,852 | \$4,852 | |
| Sewerage Agency of SM | \$3,634 | \$3,634 | \$3,634 | \$7,721 | \$7,721 | \$7,721 | \$7,721 | \$7,721 | |
| Sonoma Co Water Ag | \$390 | \$390 | \$390 | \$830 | \$830 | \$830 | \$830 | \$830 | |
| SVCW | \$35,104 | \$35,104 | \$35,104 | \$74,596 | \$74,596 | \$74,596 | \$74,596 | \$74,596 | |
| South SF | \$18,650 | \$18,650 | \$18,650 | \$39,632 | \$39,632 | \$39,632 | \$39,632 | \$39,632 | |
| Sunnyvale | \$14,545 | \$14,545 | \$14,545 | \$30,908 | \$30,908 | \$30,908 | \$30,908 | \$30,908 | |
| Treasure Island | \$249 | \$249 | \$249 | \$530 | \$530 | \$530 | \$530 | \$530 | |
| Vallejo Sanitation & FCD | \$15,760 | \$15,760 | \$15,760 | \$33,489 | \$33,489 | \$33,489 | \$33,489 | \$33,489 | |
| West County Agency | \$14,133 | \$14,133 | \$14,133 | \$30,032 | \$30,032 | \$30,032 | \$30,032 | \$30,032 | |
| | | | | | | | | | |
| * Note: Since the Nutrient Surcharge is based on the average of the three most recent years of discharge of total nitrogen, your agency's | | | | | | | | | |
| Surcharge may change slightly over time. | | | | | | | | | |
| | | | | | | | | | |

San Francisco Bay Nutrient Management Strategy Nutrient Technical Workgroup

Date/Time: May 4, 2017, 9:00 AM to 12:30 PM

Location: San Francisco Estuary Institute, 4911 Central Ave, Richmond, CA

Remote Access: 1.415.594.5500, Access Code 808-941-519#

<https://join.me/sfei-conf-cw3>

AGENDA

| Agenda Item | Lead | Time |
|--|----------------|---------------|
| 1 Welcome, Introductions and Agenda Review | PT | 9:00-9:10 |
| 2 Information Item: FY18 Program Plan Approval Process <ul style="list-style-type: none">Process for FY18 Program Plan approval <p><i>Desired outcomes:</i> Informed committee</p> | DS | 9:10-9:20 |
| 3 Science Program Technical Update <ul style="list-style-type: none">Presentation of recent work, findings, and future direction (each 20 min presentation + 10 min discussion)<ul style="list-style-type: none">ModelingMoored Sensors,, Dissolved oxygenPhytoplankton, HABs, and toxins <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none">Informed committee, and technical feedback on Core Program ActivitiesTechnical input on planned FY18 Core Program Activities | RH LM DS | 9:20 - 11:00 |
| Break | | 11:00 - 11:10 |
| 3 Discussion Item: FY18 Program Plan <ul style="list-style-type: none">Overview of proposed projects for FY18 (15 min)Discussion of the whole suite of proposed studies (50 hr)Capture NTW feedback and priorities (10 mins) <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none">Feedback on proposed FY18 studiesConcise summary of NTW meeting for the Steering Committee <p><i>Materials:</i> Draft FY18 Program Plan</p> | DS | 11:10 - 12:25 |
| 4 Wrap-up, Review Action Items | PT | 12:25 -12:30 |
| Adjourn | | 12:30 |

Summary of Feedback from Nutrient Technical Workgroup on 5/3/17

1. **There was consensus that P1-P4 were the highest priorities for available funding but that all proposed projects had merit. No projects should be eliminated from the list. If possible, at least a portion of P7 should be funded.**
2. P1 (Toxins in mussels). Add Tomales Bay mussels samples, as a way of beginning to get at these questions. Could be a relatively low cost start (maybe get an intern, or UCD-BML to help with this) (YS)
3. P4. The scope of the synthesis report was discussed
 - a. Define the deliverables more. (IW)
 - b. Scope should include developing key indicators that we can present consistently to track status and trends. Include review by science advisors and stakeholders. (MC)
 - c. Scope should include ground truthing the current AF with the latest data (IW)
 - d. There will need to eventually be an AF1.1 or 2.0; we need to be cognizant of the 7 year deadline in determining when to launch that effort. Should discuss at fall SC meeting (DW)
4. Adjusting Priorities: High Priorities for NMS Funds or Fundraising
 - a. P7 is a high priority. Consider funding at least some part of P7. Include coordination with coastal monitoring. (TH)
 - b. P14 should be higher priority because it is helpful for modeling. Should be above P10 at least. (MLE)
 - c. P6 is very important, but not sure that it should replace P1-P4. (ED)
5. Adjusting Priorities: Low Priorities for Fundraising
 - a. P11 (DNA) and P12 (coastal exports) are new topics and not a priority now (LV, TM, MLE)
 - b. P10 (HAB investigations) is not a good topic to pursue with NMS money. Studying the phytoplankton community and HABs, and mussel toxins are the best ways to pursue these issues at this time. (ED)
6. P13. Data management
 - a. Initial focus should be on making the data accessible (YS)
 - b. Consider working with some data scientists from Silicon Valley to provide input. (YS)
 - c. Can this project be removed from the FY18 list if it is being funded with left-over FY17 monies? (IW)
7. Organization/Presentation
 - a. Group the proposed projects by the management questions they address. (YS)
 - b. Show how far along we are toward answering the questions using a gantt chart. (LT)
 - c. Split the larger projects into multiple tasks (YS). Some tasks may be appropriate for FY18, while others can wait. Not all or nothing. Example is coastal export. Some work in FY18 would be of interest to EBMUD but tackling on the whole issue should wait.
 - d. Group projects into two tiers - recommended for funding and not. It will be simpler. (PT)
8. Other Comments
 - a. C1.2 (Core Modeling). Convene a Model Evaluation Group (MEG) in the fall. Need funding for honoraria and travel.
 - b. P3. Edit text of intercalibration study. The DRP budget number is \$15k, not \$50k.
 - c. Moored Sensors. Data on managed pond exports is a critical gap.

Characterizing DO related habitat quality in LSB sloughs and open Bay

Collaborators: SFEI, SCCWRP, expert advisors

Goal

Develop, and begin implementing, a work plan to build the NMS' scientific basis for assessing DO-related habitat quality in sloughs, creeks, and open-Bay areas of Lower South Bay.

Background

The San Francisco Bay Basin Plan established dissolved oxygen criteria of 5 mg/L and a 3-month median of 80% saturation in all tidal regions. Historical monthly sampling in the SFB's deep channel indicates that conditions are generally well above this threshold. However high-frequency data collected over the past few years in sloughs and some open-Bay areas of Lower South Bay indicate that that DO frequently falls below the basin plan standard of 5 mg/L. In some cases, these departures below 5 mg/L are modest, infrequent, and/or short-lived (minutes to a couple hours). In other cases, concentrations commonly reach 2-3 mg/L for several hours per day.

Although the Basin Plan provides a specific numeric threshold for DO, it does not offer further guidance with regard to frequency, duration, or magnitude of excursions below 5 mg/L. Large uncertainties remain about DO spatio-temporal patterns, and about the relative importance of naturally-occurring low DO versus the effects of anthropogenic nutrients. Beyond those questions, there has been insufficient work to date in LSB related to identifying organisms utilizing these habitats and DO conditions that would be considered protective.

Approach and Progress to Date

The FY2017 output of this overall effort is a report that will inform work priorities to characterize habitat quality in the Lower South Bay with respect to DO.

The report will synthesize existing **data** and **literature** on the topics of:

1. The magnitude and variability of DO in the Lower South Bay :
 - What is the severity, extent (space), duration, and frequency of low DO in this region?
2. Habitat usage by pelagic and benthic species:
 - What are the key biota (e.g., fish, benthic invertebrates, microbial community) utilizing LSB habitats, and other key ecosystem functions (e.g., microbial transformations), and the DO levels needed to support these usages??
 - What were key biota in decades past, based on historical accounts?
3. The physiological and behavioral responses of animals to DO regimes
 - Meta-analysis of the implications of low DO for key functions of habitat of LSB species, including:

- i. physiological and behavioral factors that determine organisms' DO requirements
- ii. acute and chronic effects of low DO at both the individual and population levels
- iii. and existing data on DO requirements for individual taxa or relevant surrogate species

The report will also outline studies to be conducted to resolve critical knowledge gaps.

To date, we have developed the near-term work plan, including specific and new data analyses to be performed before the workshop, assembled our panel of experts, and laid out a timeline.

This work will be accomplished by a team of experts and SFEI staff collaborating on the aggregation and analysis of existing data and literature, and input will be solicited from stakeholders, regulators, and the NMS Steering Committee. A workshop will be held in April 2017 to establish the current state of knowledge pertaining to items 1-3 above, and to devise studies to be performed over the subsequent 1-2 years.

Summary of Experts:

| Discipline | Contribution | Individual | Role |
|--|---|---------------------------------|--|
| Ecologist/ oceanographer specializing in hypoxia | Guidance on process; synthesis of available science | Jim Hagy (USEPA) | Adviser, workshop participant |
| Ecologist/fish biologist | Collection and analysis of data on LSB fishes | Jim Hobbs (UC Davis) | Co-author, workshop participant |
| Ecologist | Guidance on process; provide perspective on environmental characterization from other estuaries (e.g. Long Island Sound) | Paul Stacey (Great Bay NERR) | Adviser, reviewer |
| Biogeochemist | Project management, guidance on process and technical issues | Martha Sutula (SCCWRP) | Collaborator, co-author |
| Fisheries Scientist | Guidance on process; provide perspective on environmental characterization from other estuaries (e.g. Chesapeake Bay) | Peter Tango (USGS) | Adviser, workshop participant, reviewer |
| Benthic ecologist | Analyzer of fish population and DO data to help assemble a | Melissa Foley (USGS) | Workshop participant, reviewer |

| | | | |
|---------------------|---|-------------------------------|--------------------------------|
| | holistic picture of LSB habitat | | |
| Ecologist/biologist | Guidance on synthesizing data to assess habitat quality | Matt Ferner (NERR, RTC) | Workshop participant, reviewer |
| Ecologist/biologist | Guidance on species' responses to stressors, including low DO | Andy Chang (Smithsonian, RTC) | Reviewer |
| Benthic ecologist | Guidance on SF Bay benthos and responses to DO variability | Jan Thompson (USGS) | workshop participant |

Schedule

April 2017: Workshop

May 2017: Draft report

June 2017: Final report

DRAFT

**Workshop on Dissolved Oxygen and Habitat Quality in
Lower South San Francisco Bay**

April 27-28, 2017

San Francisco Estuary Institute
4911 Central Ave, Richmond, California

Workshop Objective:

We are embarking on a multi-year project to characterize the dissolved oxygen-related quality of habitat for fish and benthos in the Lower South San Francisco Bay (LSB). This workshop represents our first major technical effort to lay the scientific foundation for the habitat quality characterization. The objective of the workshop is to determine the data analysis and collection required to establish this foundation. The outcome of the workshop will consist of a plan to produce a technical report or series of manuscripts reflecting 1) the current knowledge about DO-related habitat quality in LSB, 2) the key uncertainties and data gaps, and 3) a scientific prioritization of new studies to adequately diminish remaining uncertainties. A draft report outline is provided here, following the workshop agenda.

Key Questions:

1. How do we define fish and benthos “habitat” in dynamic Lower South Bay?

Macrotidal estuaries, such as the Lower South Bay, undergo drastic **physical** changes to parameters such as water volume, depth, and areal extent, throughout the tidal cycle. Tidal stage controls which regions are inundated (e.g. marshes, mudflats, channels), and currents, moving at rapidly varying velocities, advect and transform water masses with distinct properties into and out of these regions.

Superposed onto this variability in physical and chemical characteristics is the **biology**: the utilization of these regions by pelagic and benthic species. Whether each species occupies a particular area at a specific time is controlled, in part, by inundation, current speed, and water quality parameters.

We anticipate that any delineation of habitat in space will therefore be species-dependent, and will also vary with the tides. The spatial extent of habitat for a particular species will also vary with life-stage of that species. Given this, the objective is to determine areas or volumes of the estuary that 1) vary with physical characteristics imposed by the tides, including water properties such as

salinity, temperature, and turbidity, and 2) represent habitable regions for specific species at specific life stages.

Inherent in this discussion must be a determination of representative or sensitive species and life stages, in order to bound the number of habitats to be characterized.

2. *How do we merge information on the environment, distribution of animals, and biology to characterize habitat quality?*

Once time-varying, species- and life-stage-specific habitats are delineated in space, we will attempt to aggregate the physical, biological, and **chemical** characteristics of the system to quantify habitat quality. A natural division in environmental data used to delineate habitat and to characterize habitat quality might be physical (and tidal) versus chemical; i.e. inundation, current velocity, and salinity, temperature, and turbidity ranges would determine whether a volume of water could be considered habitat for a particular animal and life-stage, while the dissolved oxygen concentration would then be used to assess habitat quality. Although the water chemistry is partially described by salinity, temperature, and turbidity, and although these properties could change as a result of anthropogenic activity, for the purposes of this work, we will assume they are only representative of tidal phase and not habitat quality. Biological response to and utilization of habitats will also be used in this characterization of quality. The question is how to merge the data effectively.

3. *What future studies would most effectively and efficiently reduce the remaining uncertainties?*

There may be information yet lacking that is needed to characterize habitat quality, related to environmental water quality, hydrodynamic processes, pelagic and benthic populations and composition, and biological requirements of relevant SF Bay species. We will outline specific studies that can be carried out to resolve the uncertainties in a timely, cost-effective manner.

a. *What can we apply from other estuaries?*

Habitat assessments and regulation pertaining to DO levels have been implemented in numerous other estuaries, including Chesapeake Bay, Long Island Sound, and Suisun Marsh. What can we draw upon from these studies to inform our definitions of habitat in LSB, and in determining what DO levels are needed for high-quality habitat?

b. *What are the remaining, key uncertainties?*

We will identify the uncertainties and rank them by importance.

c. *How should the studies be prioritized and sequenced to be most effective?*

Both scientific merit and practicability will be considered in prioritizing future studies.

Workshop Agenda:

April 27, 2017

| Item | Topic | Time/Leader |
|------|--|--|
| | Light breakfast (provided) | 8:30 |
| | Introductions and Welcome | 9:00 Philip Trowbridge (facilitator) |
| | Opening remarks: Project goals, motivation, and initial conceptual model for DO and habitat condition in Lower South Bay | 9:10 David Senn & Lissa MacVean |
| | Stakeholder input: What are key considerations, concerns, and uncertainties? | 10:10 |
| | Setting the Stage: A series of presentations on what we know now Desired outcome: Initial descriptions from experts on what we already know and what we do not know about the relevant physical, biological, and chemical characteristics of the LSB. | 10:55 Philip Trowbridge |
| | The fish of LSB and their utilization of waters with variable DO levels | 11:00 Jim Hobbs |
| | The benthos of LSB and their abundance in areas with varying DO levels | 11:20 Jan Thompson |
| | Short break | 11:40 |
| | Physiological DO requirements for fish and benthos | 11:50 Denis Chabot |
| | DO Objectives in Suisun Marsh: a regulatory example | 12:10 Martha Sutula |
| | Lunch (provided) | 12:30 |
| | From physiology to field: approaches from other estuaries for evaluating DO-related impacts at the ecosystem scale | 1:15 Jim Hagy |
| | Reaching consensus on the conceptual model and our current knowledge Desired outcome: Group discussion building off the morning presentations to reach consensus on our existing understanding of environmental DO in LSB and DO demand by fish and benthos. | 1:35 Group discussion Philip Trowbridge (facilitator) |
| | Short Break | 3:00 |

| | | |
|--|--|--|
| | Reaching consensus on key uncertainties and topics of future studies Desired outcome: group discussion of highest-priority uncertainties and associated topics for future studies. Details of future studies will be reserved for discussion on Day 2. | 3:20 Group discussion Philip Trowbridge (facilitator) |
| | Summary of Day 1 and Goals for Day 2 | 5:00 Dave Senn |

April 28, 2017

| Item | Topic | Time/Leader |
|------|---|---|
| | Light breakfast (provided) | 8:30 |
| | Recap of Day 1 and Goals for Day 2 Revisiting the conceptual model of DO available and DO needs and associated key uncertainties: Did we miss anything? | 9:00 David Senn |
| | Guidance on Additional Analyses and Data Collection for Understanding DO in LSB Goal: a comprehensive technical report (see outline) or a series of manuscripts <ol style="list-style-type: none"> 1. Reach consensus on which portions are ready to be written up (current knowledge is sufficient) 2. Identify analyses that need to be completed on existing data 3. Identify no-regrets additional data collection to be performed and associated analyses 4. Prioritize the above actions based on scientific objectives 5. Establish a timeline for drafting, review, and completion of the work plan | 10:00 Group discussion Philip Trowbridge (facilitator) |
| | Wrap up and next steps | 11:30 David Senn |
| | Adjourn | 12:00 |
| | Lunch (provided) | |

Planning Subcommittee Meeting No. 26

May 3, 2017

9:00 am – 11:30 am

Water Board Offices

Chair: Mike Connor

Agenda

- | | | |
|----|--|-------|
| 1. | Agenda Modifications (All) 5 min | 9:00 |
| 2. | Review Outstanding Action items (DW) 5 min | 9:05 |
| 3. | Science Program update (DS) 20 min | 9:10 |
| | a. Staffing | |
| | b. Other | |
| 4. | Priority Updates | |
| | a. Report-Outs - 20 min | 9:30 |
| | i. Other issues | |
| | ii. Technical workshop meetings (DO 4/27-4/28) & (HABS 5/31-6/1) | |
| | b. Current Issues – 10 min | 9:50 |
| | i. EPA WQIF Proposal | |
| | c. NMS Calendar Review -10 min | 10:00 |
| | i. Review future SC and PS meeting schedules (DW/IW) | |
| | ii. Technical workshop meetings (HABS 5/31-6/1) | |
| 5. | Other Updates – 15 min | 10:10 |
| | a. TBD | |
| | b. Other (DS) | |
| 6. | Planning the next Steering Committee meeting – 60 min | 11:25 |
| | a. Review of Action items from meeting (DW) | |
| | b. FY18 Budget & proposed projects | |
| | c. Agenda planning (ALL) | |
| | d. Next steps (ALL) | |
| 7. | Adjourn or address Parking Lot items | 11:30 |

Parking Lot of Identified PS Future Agenda Items

- a. Brainstorming on future priorities for the PS (ALL)
- b. EPA nutrient criteria discussion
- c. Discuss concept of holding an annual forum on nutrients

Planning Subcommittee (PS) Meeting Summary No. 26

May 4, 2017

9:00 am – 12:00

Water Board Offices

Meeting Summary

Attendees: Tom M., David S., Ian W., Mike C., and Dave W. (notes)

Note: Action Items and Decisions are shown in *bold italic*.

1. **Agenda Modifications:** There were no modifications to the agenda.
2. **Review Outstanding Action items:** The Action Items from Meeting #25 were reviewed and were either accomplished or are on this agenda for further discussion.
3. **Science Program update**
 - a. **Staffing** - The Science Manager (SM) reported that the new modeler had just started.
 - b. **Other** – The SM was asked what the most recent plot of Chl-a vs. time looks like. He reported that for 2016 it continues to be flat. This prompted a discussion of the validity of the Bay losing its resilience and the use of Chl-a as an indicator of potential impairment. A discussion then ensued of the importance of the Assessment Framework (AF) and how it will be utilized. The WB stated that we need to know where we want to go and to build the science work to get there. It was agreed that the AF should be a major topic of discussion at the September Steering Committee (SC) Meeting. The first AF indicated that there was no issue with DO in the Bay proper. There now is a need for an update of the AF to address DO in the margins.
4. **Priority Updates**
 - a. **Report-Outs**
 - i. **Other issues** – No report
 - ii. **Technical workshop meetings (DO 4/27-4/28) & (HABS 5/31-6/1)**
 - The DO Workshop was well attended and successful. Several observers representing BACWA, EPA, and the Water Board attended.

b. **Current Issues**

i. **EPA WQIF Proposal** – It was reported that a discussion is on-going with the City of Hayward on conducting a wetlands project. A decision on committing funds should be coming shortly from Hayward. A concern about the project is the potential for creating an endangered species habitat that will require on-going maintenance into the future, however this concern may be addressed by the policy issue on waters of the US which excludes treatment works. If the project moves forward, a request for a letter of support would be made to BACWA.

c. **NMS Calendar Review**

i. **Review future SC and PS meeting schedules** – The next SC Meeting is scheduled for June 9th. The Planning Subcommittee (PS) meeting originally scheduled for the 7th is cancelled. The main item on the agenda will be the approval of the FY 18 Workplan. A suggestion was made to create a standing agenda item for the purpose of asking each SC member what funding they are prepared to provide to further the Science Program. **Action Item: The SM is to include a standing agenda item to the SC agendas for the purpose of soliciting additional funding for the science program.** The SM stated he has had discussion with the USGS on a long term MOU for their assistance in monitoring. This may provide the opportunity for matching funds being received from the USGS.

ii. **Technical workshop meetings (HABS 5/31-6/1)** – The HAB Workshop is scheduled for the end of May.

5. **Other Updates**

a. **TBD** - The SM provided a brief update on the ammonium paradox. It was suggested that Regional San provide a brief update at the June SC Meeting on the special work they are going to be undertaking to assess the impacts of the new treatment facilities on the Delta. **Action Item: The SM to request that Regional San provide an update at the June SC Meeting.**

b. **Other** – No Report

6. **Planning the next Steering Committee meeting**

- a. **Review of Action items from meeting** – There were no Action items from the last SC Meeting.
- b. **FY18 Budget & proposed projects** – The SM stated that there will be a specific set of questions for attendees at the June SC meeting on the NMS Draft FY 18 Program Plan and that folks need to come prepared to discuss the Program Plan.

Monitoring will be a priority in the Program Plan. Approximately \$400k will be available for special projects. It was suggested to review the core monitoring and modeling program first as part of the presentation. Also to make a presentation on how added funding has come into the NMS through the Program Coordination efforts.

- c. **Agenda planning** – A suggestion was made to put what agencies are doing about funding the NMS early in the agenda. The general sense was that focusing on how agencies can help in funding the NMS and in coordinating their own activities is very important.

It needs to be made clear what the outcomes are being sought from the SC similar to how the RMP develops its Workplans. The goal is to approve a suite of projects that could be undertaken as funding develops and that earmarked funds are given highest priority. The color coding of priorities for projects should be reduced from 5 colors to 3. When funds come in the PS could pick the projects to be worked on if time urgent or the decision could be discussed at the next SC meeting.

- d. **Next steps** – Finalizing the agenda and packet material for the SC meeting in June.

7. Adjourn or address Parking Lot items: the meeting adjourned at noon.

Parking Lot of Identified PS Future Agenda Items

- a. **Brainstorming on future priorities for the PS**
- b. **EPA nutrient criteria discussion**
- c. **Discuss concept of holding an annual forum on nutrients**

San Francisco Bay Regional Water Quality Control Board

San Francisco Bay Nutrient Management Strategy (NMS) Steering Committee Meeting

Date/Time: June 9, 2017, 9:00 AM to 3:30 PM

Location: SFEI, Richmond, CA

4911 Central Ave

Facilitator: Phil Trowbridge

AGENDA

| Agenda Item | | Lead | Time |
|-------------------------|--|----------|-------------|
| 1 | Welcome, Introductions and Agenda Review | PT | 9:00-9:05 |
| 2 | Decision Item: Approve Prior SC Meeting Summaries <i>Materials:</i> <ul style="list-style-type: none"> March 10, 2017 meeting summary | DW | 9:05-9:10 |
| 3 | Action items <ul style="list-style-type: none"> Update on action items from previous meetings <i>Materials:</i> <ul style="list-style-type: none"> Action Items Table | DW | 9:10-9:15 |
| 4 | Program Update: <ul style="list-style-type: none"> Science Program and Financial update Planning Subcommittee update <i>Materials:</i> <ul style="list-style-type: none"> TBD | DS IW | 9:15-9:30 |
| 5 | FY18 Program & Budget Approval <ul style="list-style-type: none"> Overview of FY18 proposed projects Discussion FY19 Steering Committee Mtng objectives (schedule) <i>Materials:</i> <ul style="list-style-type: none"> TBD <i>Desired outcome:</i> SC approval of FY18 program plan | DS | 9:30-11:30 |
| Lunch (provided) | | | 11:30-12:15 |
| 7 | Technical Update - Science Program and/or special project <ul style="list-style-type: none"> Technical Workshops - outcomes and summaries <ul style="list-style-type: none"> Dissolved Oxygen (4/27-4/28) HABS & toxins (5/31-6/1) Other TBD <i>Materials:</i> <ul style="list-style-type: none"> TBD | DS | 1:00-3:00 |
| 8 | Other Business | PT | 3:00-3:15 |

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay

| | | |
|---|--|--------------|
| <ul style="list-style-type: none"> • Updates from other activities | | |
| 10 | Action Items and Wrap-up Next meeting date: September 8, 2017 @ Water Board Following meeting: December 8, 2017 @ Water Board | PT 3:15-3:30 |
| Adjourn | | 3:30 |

NOTES:

- *Public comment periods will be accommodated at the end of each agenda item (excluding item 1). The duration of each comment period will be at the discretion of the meeting facilitator.*
- *Breaks will be taken at the discretion of the meeting facilitator and the Steering Committee.*



Executive Board Special Meeting Agenda

SF Bay Regional Water Board / BACWA Executive Board Joint Meeting
May 5, 2017 10:00 AM -12:00 PM
SF Bay Water Board, 1515 Clay Street, St. 1400 Oakland, CA

ROLL CALL AND INTRODUCTIONS – 10:00

PUBLIC COMMENT – 10:05

DISCUSSION/OTHER BUSINESS- 10:10

| Topic | Goal | Time |
|---|---|-------|
| 1. Nutrients <ul style="list-style-type: none">a. Optimization and Upgrade Studiesb. Recent Workshops | <ul style="list-style-type: none">• Update on progress of optimization/upgrade studies• Debrief from NMS workshop and NTW meeting• | 10:15 |
| 2. 303(d) Listing | <ul style="list-style-type: none">• Next steps for Bay sediment toxicity | 10:45 |
| 3. State Toxicity Provisions | <ul style="list-style-type: none">• Regional Water Board discretion on acute toxicity and IWC• Regional Water Board discretion on routine monitoring during TRES | 10:55 |
| 4. Near Shore Discharge Strategies | <ul style="list-style-type: none">• How to permit projects that involve shallow discharges – Oro Loma and future projects | 11:15 |
| 5. State Water Board Beneficial Uses and Mercury Objectives | <ul style="list-style-type: none">• Next Steps | 11:25 |
| 6. Chlorine Residual | <ul style="list-style-type: none">• Basin Plan amendment versus alternative compliance mechanisms | 11:30 |
| 7. Microplastics and CECs | <ul style="list-style-type: none">• BACWA members participating in SFEI study on microplastics | 11:55 |

ADJOURNMENT

Joint BACWA/Regional Water Board Staff Meeting Summary

May 5, 2017, 10am-12pm

Attendees:

Amit Mutsuddy, San Jose/Santa Clara
David Williams, BACWA
Lorien Fono, BACWA
Lori Schectel, CCCSD
Jim Ervin, San Jose/Santa Clara
Laura Pagano, SFPUC
Jackie Zipkin, EBMUD

Mike Connor, EBDA
Bill Johnson, Regional Water Board
Robert Schlipf, Regional Water Board
Bruce Wolfe, Regional Water Board
Tom Mumley, Regional Water Board
Tom Hall, EOA

1. Introductions

2. Nutrients

a. *Optimization/Upgrade Study Updates*

The facility reports have almost all been distributed to agencies for review, and they will definitely be wrapped up prior to the June 7 BACWA members' workshop on the Optimization/Upgrade Studies. The reports will need to be signed off from each agency before they are incorporated into the Final Report, which will hopefully be complete by the end of the year, and certainly by the deadline of July 1, 2018. All agencies have responded to the recycled water survey to calculate the nutrient loads removed by water recycling. BACWA is QA-ing the survey results with staff at DWR. There was a question from the Regional Water Board about the role of the State Water Board in the State's recycled water survey.

b. *Overview of recent science meetings*

NTW – David Senn has recruited new scientists to increase the capacity of the program. There was renewed discussion about the Assessment Framework and how to begin to groundtruth it.

DO Studies – Participants were pleased with how the DO workshop was conducted, including the panel of national experts that were invited to participate, along with SFEI staff. Regional Water Board staff expressed confidence that DO is an issue that can be understood through the proposed studies. One of the items at the meeting covered the impacts of pond discharges in the Lower South Bay and what kind of management strategies are appropriate. The next science workshop will be on harmful algal species, and will be held at the end of May.

3. 303(d) list update

Tom Hall, representing the Santa Clara Valley Urban Runoff Pollution Prevention Program and the City of Sunnyvale, requested that Guadalupe Slough's proposed toxicity listing be transitioned to Category 3 or delisted. He passed out a table of exceedences allowable for delisting. While open to the concept, Regional Water Board staff expressed concern about workload, and suggested that if the discharger community

could do the legwork on this issue, and they would propose it to the State Water Board. There was concern expressed that having too many asks would jeopardize the whole Region 2 303(d) proposed package, including the transition of the proposed Baywide toxicity listings from Category 5 to Category 3. There was a discussion about next steps on the Baywide toxicity listing, since none of the stakeholders are interested in heavily investing RMP fund in further investigations on the apparent sediment toxicity which are unlikely to yield any results. There are some external advisors to the RMP who will be advocating for more benthos work.

4. Toxicity

There was a discussion about the provisions in the preliminary draft of the State toxicity Provisions, which were circulated to the POTW community by the State Water Board. BACWA has been participating in an effort with CASA to provide redlines to the State Water Board prior to the release of the public draft this summer. BACWA will send the Regional Water Board a copy of the redlines when they are complete. The Regional Water Board will also contact State Water Board staff about its concerns, and would like to hear what BACWA's top issues are that could be addressed.

5. Tribal and Subsistence Fishing Beneficial Uses

The final adopted mercury provisions included new language stating that existing TMDLs could be reopened to accommodate the new beneficial uses, should they be designated. If the assumptions and calculations of the existing TMDL were still valid, then the implementation plan could remain the same, except with a longer timeframe for compliance. Regional Water Board staff pointed out that no actions on the new beneficial uses would take place unless they were designated, which is an issue they will look at during the 2018 Triennial Review. Additionally, permit-by-permit variances are now allowable to make sure that POTWs do not have to waste resources to remove *de minimis* mercury loads.

6. Chlorine Residual

Regional Water Board staff have been internally discussing the feasibility of a Basin Plan Update to address chlorine residual permitting. To implement a change in chlorine residual permitting, staff would need to develop a project plan and do the work, adopt the Basin Plan Amendment, get approval from the State Water Board, EPA and OAL, and then Public Notice the change, then finally incorporate it into permits which could be accomplished with a blanket permit amendment. SFPUC has a permit requirement for a study looking at dechlorination alternatives, and the Regional Water Board and BACWA will take another look at the study to ensure that it is supportive of this effort. BACWA offered to fund the development of a workplan for a Basin Plan Amendment and to fund the WB staffing needed to complete the plan. The WB stated they wanted to internally develop their thoughts on what would be needed in a workplan and would get back to BACWA after a few weeks.

7. CECs and Microplastics

BACWA offered to help SFEI recruit one more POTW participant for their microplastics study. SFEI stipulated that they would like a larger agency that does advanced treatment, so FSSD agreed to participate. Regional Water Board staff reiterated the

importance of POTW involvement in CECs studies. The State Water board is continuing to develop its own strategy, but the process has slowed down.

8. BAAQMD Rule 11-18

BACWA gave an update on its discussions with BAAQMD staff on Rule 11-18, which will require health risk assessments and implementation of TBARCT for facilities above a certain threshold of cancer risk related to emissions. BACWA is waiting for a letter from BAAQMD staff stating that POTWs listed in Phase I will be moved to Phase II to give agencies time to update their emissions factors. Regional Water board staff suggested that BACWA put together a list of 11-18 requirements that may conflict with the core mission of POTWs to treat wastewater. Regional Water Board staff stated the importance of memorializing POTW actions that mitigate greenhouse gas emissions in local climate action plans.

9. Near Shore Discharges

The Region needs to consider how to address the permitting challenges from reusing freshwater for habitat. Oro Loma will be trading nutrient removal for near shore discharge during wet weather. Biosolids are an excellent way to sequester carbon and could be used for wetlands fill. SFEI did preliminary work looking at wetland treatment of wastewater, which may continue under the next watershed permit. The State Water Board has indicated it will provide \$250K in funding for the RO Concentrate Wetland Treatment study that is ongoing at Santa Clara Valley Water District. The Regional Water Board is also leading a near-shore discharge study that will be presented to the Board in the fall of 2017.

10. Cannabis Growers

The State Water Board is developing regulations to govern cannabis production. While outdoor growers will need permits, indoor grows will not, although they will need permission to discharge to their local POTW.

ADJOURNMENT

**BACWA - BAAQMD Meeting:
"Details" Discussion on Impact of Proposed Rule 11-18
on Bay Area Wastewater Treatment Facilities**

Agenda

Date: June 1, 2017
Time: 10 AM - 12 PM
Location: BAAQMD Office - 375 Beale Street, 6th Floor, San Francisco, CA 94105

- 1) Introductions
- 2) Health Risk Assessment Modeling
 - a) Update influent flow and concentrations for Phase 1 facilities
 - b) Emission Sources that Pose the Highest Risk
 - c) Update emission factors for specific toxic air contaminants
- 3) TBARCT
 - a) Appropriateness
 - b) Cost Estimates (cost-benefit and economies of scale)
- 4) Next Steps

BAAQMD 2017 Clean Air Plan - Control Measures that May Impact BACWA Members

Legend

| | |
|-----|---------------------------|
| SS | Stationary Source |
| TR | Transportation |
| EN | Energy |
| BL | Buildings |
| AG | Agriculture |
| NW | Natural and Working Lands |
| WA | Waste |
| WR | Water |
| SL | Super-GHGs |
| FSM | Future Study Measure |

| Number | Name | Pollutant | Description | Rule Development Schedule (2015-2020) | Preliminary Notes, Concerns, Recommendations |
|--------|------------------------------|-----------|---|--|---|
| SS2 | Equipment Leaks | ROG, GHG | Reduce fugitive emissions of organic gases, including methane, from refineries, chemical plants, bulk plants and bulk terminals. Develop an implementation plan for Rule 8-18 to require future monitoring of equipment in heavy liquid service, require facilities to identify the causes of background readings greater than 50 parts per million volume (ppmv), etc. | Rule 8-18, adopted December 2015 | The focus is on refineries; however, staff have inquired about leaks around anaerobic digesters and wanted to investigate further. |
| SS21 | New Source Review for Toxics | TAC | Propose revisions to Air District Rule 2-5, New Source Review of Toxic Air Contaminants, based on OEHHA’s 2015 Health Risk Assessment Guidelines and CARB/CAPCOA’s 2015 Risk Management Guidance. Revise the Air District’s health risk assessment trigger levels for each toxic air contaminant using the 2015 Guidelines and most recent health effects values. | NSR for Toxics, Rule 2-5, adopted in December 2016 | Consider educating BACWA members on the implications of the revisions, via email and the website. Possibly have a presentation by SVCW on their recent experience. |
| SS16* | Basin-Wide Methane Strategy | GHG | Quantify and reduce emissions of methane, and its co-pollutants (e.g., N ₂ O and VOCs), from all sources throughout the Air District by implementing a coordinated strategy that combines research, rulemaking and collaborations with state agencies and other programs. The Air District will seek to better understand and quantify methane and nitrous oxide emissions at POTWs in order to inform potential rulemaking to address these potent greenhouse gases (under WR1). <i>Waste, Water and Agriculture Sectors: "Due to the uncertainty and poor understanding of the emissions from sources in these sectors, such as composting, wastewater treatment, and livestock, emissions reductions from amending Rule 8-2 cannot be estimated at this time ."</i> | To be completed in 2017 | BACWA should track this and consider being involved in the rule-making, in coordination with control measure WR1. |
| SS17 | GHG BACT Threshold | GHG | Revise Air District rules to reduce the threshold at which facilities must implement Best Available Control Technology to control their GHG emissions. This measure would lower the threshold at which facilities subject to the Air District’s New Source Review permit program must implement the “Best Available Control Technology” to control their greenhouse gas (GHG) emissions below the current 75,000 tons per year (tpy) CO ₂ e. In addition, this threshold would apply to all regulated facilities, not just “major” facilities. | Rule 2-2, to be updated in 2017 | BACWA should track and consider becoming involved in the rule amendment process to ensure the GHG emissions considered in this rule continue to be fossil fuel based (following EPA's determination). |

| | | | | | |
|------|--|----------------|---|-------------------------------------|--|
| SS20 | Air Toxics Risk Cap and Reduction from Existing Facilities | TAC | Consider further reducing public exposure to toxic air contaminants (TACs) from existing facilities through Draft Rule 11-18. | Rule 11-18, to be adopted in 2017 | Continue engaging BAAQMD staff on POTW concerns. Workshop being held March 9th. |
| SS22 | Stationary Gas Turbines | NOx | Reduce NOx emissions from stationary gas turbines. The Air District is considering whether more stringent limits are warranted for medium-sized gas turbines. | Rule 9-9, to be updated in 2017 | BACWA should track progress and can estimate the impact on members (i.e., look into how many members have gas turbines and implications). |
| SS31 | General PM Emission Limit | PM | Reduce or revise the Air District’s allowable weight rate limitations for particulate matter (especially, PM 2.5). | Rule 6-1, to be updated in 2017 | Recommend tracking Rule 6-1 updates. |
| SS18 | Basin-Wide Combustion Strategy | GHG, PM | Stabilize and then reduce emissions of greenhouse gas (GHG), criteria air pollutant and toxics from stationary combustion sources throughout the Air District by first establishing carbon intensity caps on major GHG sources (Phase 1), and then adopting new rules to reduce fuel use on a source-type by source-type basis (Phase 2). | To be completed in 2018 | BACWA should be involved in this rule development on behalf of the wastewater community. |
| SS40 | Odors | Odors | Propose amendments to Regulation 7 to strengthen odor standards and enhance enforceability. An evaluation of newer air monitoring technologies will be aimed at increasing enforceability of the rule with respect to a wider range of odorous compounds and sources. The rule was originally intended to reduce odorous emissions from operations such as refineries, sewage treatment plants , and rendering plants - with diversion of organics from landfills, odors are now being created at diverse operations of all sizes. | Regulation 7, to be updated in 2018 | Track to understand potential cost for food waste diversion projects at POTWs to comply. |
| TR16 | Indirect Source Review | All Pollutants | Consider a rule that sets air quality performance standards for new and modified development projects. Indirect sources are development projects that generate or attract motor vehicle trips, thus “indirectly” cause air pollution from vehicles and area sources. Area source emissions include fireplaces, home heating furnaces, hot water heaters, and landscape maintenance equipment. | To be complete in 2018 | Recommend tracking the development of this rule. |
| WA1* | Landfills | GHG, ROG, TACs | Reduce emissions of methane and non-methane organic compounds from landfills by increasing standards for landfill gas collection control devices and fugitive leaks. Propose amendments to Air District Rule 8-34 to increase stringency of emission limits, including fugitive leak standards, and improve consistency with federal rules. Evaluate methane emissions at smaller or closed landfills where green waste has been accepted and consider amendments to Rule 8-34 to address fugitive methane emissions if deemed significant. | To be completed by 2018 | May not have an impact on POTWs since this is focused on emissions from landfills vs diversion of the emissions source (organic waste). |
| WA2* | Composting and Anaerobic Digestion | GHG, ROG, PM | Recognizing more organic waste is being diverted from landfills to either composting, anaerobic digestion, or a combination of the two - the Air District will develop a rule that includes emission limits based on best management practices in other areas of the state. This control measure would reduce emissions of greenhouse gases (GHGs) and volatile organic compounds (VOCs) from anaerobic digesters and composting operations by requiring best management practices derived from measures adopted by the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District (SJVAPCD). In turn, the Air District expects reductions in secondary PM emissions via ammonia emission reductions. | To be completed by 2018 | Recommend reviewing BMPs in SCAQMD and SJVAPCD for reducing GHGs and VOCs from compost and anaerobic digestion facilities to understand what BAAQMD will be considering. |

| | | | | | |
|------|------------------------------------|----------------|--|---|---|
| SS23 | Biogas Flares | NOx | Develop a new Air District rule to reduce NOx from nonrefinery flares (i.e., landfills and anaerobic digesters) and investigate potential for more stringent limits on emissions from non-refinery flares. Require that all biogas and non-refinery flares meet lowest available emissions reduction (LAER) level of 0.025 pounds of NO _x per million Btu. | To be completed in 2020 | BACWA to monitor and determine the impact of the proposed lower emissions limit for NOx. |
| SS32 | Emergency Backup Generators | DPM, TAC | Reduce emissions of Diesel PM and black carbon from back-up generators through Draft Rule 11-18, resulting in reduced health risks to impacted individuals, and in climate protection benefits. | Rule 11-18, to be updated by 2020 | Continue engaging BAAQMD staff on POTW concerns. BACWA estimating the cost impact to POTWs. |
| TR19 | Medium- and Heavy-Duty Trucks | All Pollutants | Directly provide, and encourage other organizations to provide, incentives for the purchase of 1) new trucks with engines that exceed ARB's 2010 NOx emission standards for heavy-duty engines, 2) new hybrid trucks, and 3) new zero-emission trucks. The Air District will work with truck owners, industry, ARB, the California Energy Commission, and others to demonstrate additional battery-electric and hydrogen fuel cell zero-emission trucks. | Not included in the rule development schedule | Recommend tracking the development of this program to determine if BAAQMD will consider biogas to vehicle fuel. |
| EN1 | Decarbonize Electricity Production | All Pollutants | Engage with PG&E, municipal electric utilities and CCEs to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities , food processors, public works agencies and waste management to increase use of biomass in electricity production. The measure would promote and expedite a transition away from fossil fuels used in electricity generation (i.e., natural gas) to a greater reliance on renewable energy sources (e.g., wind, solar). In addition, this measure would promote an increase in cogeneration, which results in useful heat in addition to electricity generation from a single fuel source. Among the permit requirements required by the Air District is the condition that combustion equipment – such as gas turbines and heat recovery boilers – use the Best Available Control Technology (BACT) to minimize emissions. In addition, projects may be subject to emission offset requirements, Prevention of Significant Deterioration (PSD) analysis requirements, and health risk screening analysis (HRSA) requirements. | Not included in the rule development schedule | Recommend adding the following under "Issues/Impediments": the conflict between Proposed Rule 11-18 and GHG reducing goals promoting biogas recovery and use at POTWs. Continue engaging BAAQMD staff on this conflict and provide potential impacts, costs, and solutions (e.g., exemptions). |
| EN2 | Decrease Energy Use | All Pollutants | The purpose of this control measure is to decrease the amount of energy consumed in the Bay Area through increased efficiency and conservation. With decreased energy use, less electricity generation is required, and thus there would be a reduction in the emissions of greenhouse gases (GHGs), criteria pollutants and toxic air contaminants (TACs). | Not included in the rule development schedule | Ensure POTWs would be given credit or acknowledged for their contributions in meeting this goal. |
| BL2 | Decarbonize Buildings | All Pollutants | Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with low- or zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters. | Not included in the rule development schedule | Engage with BAAQMD staff on the potential use of low-carbon biogas. |

| | | | | | |
|------|--------------------------------------|----------------|--|---|---|
| AG1 | Agricultural Guidance and Leadership | GHG | Reduce GHGs from the agriculture sector, including working to obtain funding for on-farm GHG reduction activities; promoting carbon farm plans; providing guidance to local governments on including carbon-based conservation farming measures and carbon sequestration in local climate actions plans; and conducting outreach to agriculture businesses on best practices, including biogas recovery , to reduce GHG emissions. | Not included in the rule development schedule | Recommend including reference to POTW anaerobic digesters (not just dairy digesters) and collaborating with the Healthy Soils Initiative as well for the land application of biosolids to achieve carbon sequestration. |
| NW1 | Carbon Sequestering in Rangelands | GHG | Include off-site mitigation of GHG emissions through carbon sequestration projects in the Air District’s CEQA guidance and comments. Develop climate action plan guidance and/or best practices on soil management for local agencies and farmers and their associations to maximize GHG sequestration on rangelands. | Not included in the rule development schedule | Recommend including reference to POTW role in supporting this measure through land application of biosolids. |
| NW3 | Carbon Sequestration in Wetlands | GHG | Identify federal, state and regional agencies, and collaborative working groups that the Air District can assist with technical expertise, research or incentive funds to enhance carbon sequestration in wetlands around the Bay Area. Assist agencies and organizations that are working to secure the protection and restoration of wetlands in the San Francisco Bay. | Not included in the rule development schedule | Recommend including reference to POTW role in supporting this measure in potential use of biosolids to restore wetlands. |
| WA3* | Green Waste Diversion | All Pollutants | Develop model policies to facilitate local adoption of ordinances and programs to reduce the amount of green waste going to landfills. Reduce air pollutants and greenhouse gas (GHG) emissions from the disposal of green waste in landfills. Diverting green waste, which includes both food and yard waste , away from landfills or keeping it out of the waste stream entirely would reduce the amount of methane, nitrous oxide and other volatile organic compounds (VOC)s. May develop a zero waste goal for the community while avoiding incineration. May require use of compost in place of artificial fertilizers. | Not included in the rule development schedule | Track the development of policies to ensure POTWs continue to be eligible to receive diverted food waste and the production of bioproducts are considered for beneficial use. |
| WR1* | Limit GHGs from POTWs | GHG, ROG, TACs | Initiate a process to better understand and quantify GHG emissions at POTWs (i.e, water and wastewater treatment facilities). Explore rulemaking to reduce GHGs emitted directly within POTWs (nitrous oxide and methane). Work with the POTW operators and existing organizations such as the Bay Area Clean Water Agencies (BACWA) to obtain funding for the development of green infrastructure in POTWs. This measure will also explore the potential to streamline the Air District’s permitting process to promote biogas recovery , as well as address potential cross-media regulatory issues such as State Water Resources Control Board regulations on nutrient removal (which may increase GHG emissions). Staff noted: <i>The BACWA Air Issues and Regulations Committee has expressed concern regarding potential Air District regulatory action targeting POTWs. According to BACWA, Air District regulations inadvertently discourage biogas recovery and use as a fuel substitute. For example, Air District Best Performance Standards for limiting air emissions from engines and boilers are difficult for bio-gas fired engines and boilers to meet cost-effectively. The Air District is therefore investigating these potential conflicts through implementation of this control measure.</i> | Not included in the rule development schedule | Engage with BAAQMD staff on this during our June meeting between BACWA and BAAQMD. Need to clarify our concerns accurately and assist BAAQMD staff with their efforts under this control measure. |
| WR2 | Support Water Conservation | GHG | Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance. Reduce indirect emissions of GHGs associated with the electricity use required to capture, use, convey, store, conserve, recycle and treat water and wastewater in the Bay Area. | Not included in the rule development schedule | Recommend assisting in the development of the best practices list. |

| | | | | | |
|-----------|--|-------------------|--|---|--|
| SL1 | Short-Lived Climate Pollutants | GHG, black carbon | <p>Reduce short-lived climate pollutants, aka super-GHGs. Reduce methane from landfills and farming activities through various control measures listed under waste and agriculture sectors. Develop a rule to reduce methane emissions from natural gas pipelines and processing operations, and amend regulations to reduce emissions of methane and other organic gases from equipment leaks at oil refineries. Enforce applicable regulations on the servicing of existing air conditioning units in motor vehicles, support the adoption of more stringent regulations by CARB and/or U.S. EPA, and encourage better HFC disposal practices.</p> <p>To be coordinated with other control measures achieving SLCP reductions (e.g., WA1, WA2, WA3, WA4, AG2, AG3, SS2, SS13, SS14, SS15, SS32, SS34, TR14, and TR19).</p> | Not included in the rule development schedule | Recommend monitoring this and other supporting measures to ensure POTWs continue to be considered part of the solution. |
| SL2 | Guidance for Local Planners | GHG | Track progress in adoption and implementation of super-GHG reduction measures in local plans and programs. The Air District will develop guidance to help local agencies address short-lived climate pollutants (SLCPs), or super-GHGs, in their climate action plans and programs. | Not included in the rule development schedule | Recommend monitoring this and other supporting measures to ensure POTWs continue to be considered part of the solution. |
| SL3 | GHG Monitoring and Emissions Measurement Network | GHG | Develop a GHG air monitoring plan/network for the Bay Area that includes strategic selection of measurement locations (to identify methane hot spots!), selection of relevant measurement technologies and procurement of appropriate GHG instrumentation, calibration gas standards and sampling logistics. Establish, operate and maintain the GHG air monitoring network. Collaborate with the scientific community to use different methods to estimate methane emissions in the Bay Area and identify sectors and areas for focused measurement study. | Not included in the rule development schedule | Important for POTWs to have accurate methodologies considered and appropriate measurement technologies and sampling approaches considered. |
| FSM - SS1 | Internal Combustion Engines | NOx | <p>Consider lower NO_x emission limits for some categories of internal combustion (IC) engines. This measure is based on San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4702 which appears to have lower NOx emission limits for some categories of internal combustion (IC) engines, compared to BAAQMD Regulation 9-8. Rule 4702 also applies to smaller engines than Regulation 9-8. It should be noted that the South Coast AQMD Rule 1110.2 (September 2012) applies only to engines larger than 50 bhp.</p> | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS2 | Boilers, Steam Generator and Process Heaters | NOx | <p>Examine the possibility of further NOx emission reductions from small Boilers, Steam Generators and Process Heaters from 2MM to 5MM BTU/hr in size.</p> <p>This measure is based on Measure D.1.2 from the 2012 San Joaquin Valley APCD PM 2.5 Plan. Measure D.1.2 examined the possibility of further emission reductions from Boilers, Steam Generators and Process Heaters from 2MM to 5 MM BTU/hr in size through San Joaquin’s Rule 4307.</p> | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS3 | GHG Reductions from Non-Cap-and-Trade Sources | GHG | <p>Use quantitative analysis to find greenhouse gas (GHG) reduction opportunities from stationary sources that are not covered under the ARB’s Cap-and-Trade Program.</p> <p>Preliminary analyses indicate that the bulk of these emissions occurred in the biofuel, natural gas distribution, sewage treatment, and landfills sectors.</p> | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS4 | Methane Exemptions from Wastewater Regulation | GHG | Conduct research and testing to identify significant methane sources in the refinery wastewater collection systems and to determine how these sources may be minimized or controlled. In addition, investigate if nonrefinery wastewater systems have significant methane emissions and quantify potential emission reductions for methane, as well as for ROG, in order to determine if Rule 8-8 should be expanded to additional non-refinery sources. | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |

| | | | | | |
|-----------|--|--|--|---|---|
| FSM - SS5 | Controlling SSMM Emissions | NOx, PM, SO ₂ , ROG, TAC | Reduce emissions by considering implementing requirements to minimize start-up, shutdown, maintenance, and malfunction (SSMM) emissions through abatement technology, equipment design considerations, revised activity scheduling or planned redundancy. | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS6 | Carbon Pollution Fee | GHG | Explore options for placing a fee on fossil fuels based on the carbon intensity of the fuel, to reduce use of fossil fuels. This reduction in consumption would reduce emissions of criteria pollutants, toxic air contaminants and greenhouse gases (GHGs) not only because less fuel is combusted but also because less fuel is processed and manufactured in response to reduced demand. | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS8 | Dryers, Ovens, and Kilns | NOx | Seek further emission reductions of NOx from combustion devices that are currently exempt from the requirements of Rule 9-7, specifically, devices in the category of “kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining, or vitrifying” (9-7-110.6) | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |
| FSM - SS9 | Omnibus Rulemaking to Achieve Continuous Improvement | GHG | This measure seeks to accelerate the pace of greenhouse gas (GHG) emission reductions in the Bay Area by exploring the feasibility of broad-sweeping, or “omnibus,” rulemaking. | Not included in the rule development schedule | Recommend BACWA track the development of this measure and engage with BAAQMD staff. |

***Air District to prioritize implementation of these control measures**

BACWA Toxicity Workshop

Draft Agenda

Late Summer 2017

1. Toxicity 101
 - a. How are toxicity tests conducted?
 - b. How is toxicity evaluated using the test result data?
 - i. Point Estimates
 - ii. TST
 - c. How to conduct a TRE
 - d. Species screening
 - e. How to review lab reports

2. Draft State Toxicity Provisions
 - a. Numeric Limits – MDEL and MMEL
 - b. Reasonable Potential
 - c. Monitoring Frequency

3. Tips and Tricks for conducting toxicity testing (Panel Discussion).

Example topics:

 - a. How to choose a lab
 - b. How to negotiate a permit
 - c. How to cut costs
 - d. Cost vs. data quality tradeoffs
 - e. Confounding factors that can effect toxicity tests



DRAFT

May 22, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

VIA EMAIL: commentletters@waterboards.ca.gov

Subject: Comment Letter – June 20, 2017 Board Meeting – FFY 2017 CWSRF IUP

Ms. Townsend,

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Fiscal year 2017 Clean Water State Revolving Fund Intended Use Plan and Revised Guidelines for Proposition 1. BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health. BACWA supports a Recycled Water Committee with participants from both the water and wastewater sectors, who are interested in increasing recycled water in our Region.

BACWA would like to take this opportunity to address how the State Water Board may allocate funding for agencies who have applied for financial assistance from the State Water Board, and have been assigned to Group 3. BACWA recommends the Division of Financial Assistance consider the following when considering projects for funding:

1. Maintain the Geographic Distribution split in the June 2015 Water Recycling Funding Program (WRFP) Guidelines
 - i. A minimum of 40 percent of the funds to projects within, Los Angeles County, Orange County, Riverside County, San Bernardino County, San Diego County and Ventura County.
 - ii. A minimum of 40 percent of the funds distributed to projects within the remaining counties.
 - iii. The remaining 20 percent will be distributed to water recycling projects located in any California county.
2. For those projects that have submitted a complete application for WRFP funding, allow the projects to begin construction prior to issuance of a funding agreement without jeopardizing reimbursement for construction costs.

BACWA understands that DFA may be considering how projects are prioritized. BACWA recommends the following:

1. Prioritize multi-benefit projects that reduce the demand on potable water supplies, assist communities in meeting new requirements for urban water conservation, assist local agencies in meeting new requirements under the Sustainable Groundwater Management Act (SGMA), improve water quality and enhance local surface water and groundwater supplies, reduce greenhouse gas emissions, provide environmental enhancement, and other beneficial uses.
2. Prioritize projects that are ready to proceed (i.e., those with completed plans, specifications, and environmental documentation). This prioritization would result in the State advancing towards reaching its water recycling goals sooner.
3. Do not include project yield as a criteria for prioritization of projects. No matter the size of the project, the project proponents recognize its merits for their communities and are willing to invest in them. A comparably small project can provide significant benefits to the community it serves. To encourage more recycled water production throughout the State and to keep advancing towards the State's water recycling goals, we recommend that the State recognize each project for the benefits that it provides in its region.

BACWA recently surveyed our members on their current and planned recycled water production, and preliminary results of the survey show that Bay Area agencies are currently in various stages of planning projects to more than double our Region's recycled water capacity. These results demonstrate the community's enthusiasm for increasing recycled water, now and into the future. However, many of these projects will not move forward without funding assistance. Because of this obvious demand, BACWA recommends that the Board issue new bonds sufficient to fund all Category 1, 2, and 3 recycled water projects. Many of these projects address urgent needs of communities throughout the state. Many of them are ready to proceed. Delaying the projects represent a delay in the benefits that they provide to their region and to the State.

Please do not hesitate to contact Leah Walker, vice-Chair of BACWA's Recycled Water Committee, at lwalker@ci.petaluma.ca.us, if you would like to discuss these comments further.

Respectfully Submitted,



David R. Williams
Executive Director
Bay Area Clean Water Agencies

BACWA State Water Board funding priorities

May 22, 2017

Page 3 of 3

cc: BACWA Board

Rhodora Biagtan, BACWA Recycled Water Committee Co-Chair

Leah Walker, BACWA Recycled Water Committee Co-Chair

Sherry Hull

From: Sherry Hull
Sent: Tuesday, May 16, 2017 12:09 PM
To: Sherry Hull
Subject: FW: Chlorine Residual Limit

From: David Williams
Sent: Thursday, May 4, 2017 6:31 PM
To: 'Wolfe, Bruce@Waterboards' <Bruce.Wolfe@waterboards.ca.gov>; Mumley, Thomas@Waterboards <Thomas.Mumley@waterboards.ca.gov>
Cc: Mike Connor <mconnor@ebda.org>; 'Naomi.Feger@waterboards.ca.gov' <Naomi.Feger@waterboards.ca.gov>; Johnson, Bill@Waterboards <Bill.Johnson@waterboards.ca.gov>; Looker, Richard@Waterboards <Richard.Looker@waterboards.ca.gov> <Richard.Looker@waterboards.ca.gov>
Subject: Chlorine Residual Limit

Bruce/Tom,

Thank you for taking the time to meet with Mike C. and me yesterday to discuss the possibility of a Basin Plan amendment to modify the 0.0 mg/l chlorine residual limit. We understand this entails a multi-step process consisting of 1. Preparing a project plan/scope of work, 2. Completing the necessary work, 3. Approval by the SF Bay Water Board, 4. Approval by the SWRCB, 5. Review by the OAL, 6. Review by EPA, and finally permit modifications and public notification. BACWA recognizes that this effort will take resources to complete and that it may not be the highest priority for the WB so BACWA is prepared to provide resources to assist in the process. The first step is to prepare a draft work plan/scope of work and review it with the WB staff such that it meets your needs. Once a work plan is ready to go, we can then estimate the resources needed to complete the plan. The BACWA Board would then need to approve the needed resources at which time we can jointly figure out the best way to provide those resources to the WB so that the work plan can be completed.

In order to kick-off this effort BACWA agreed to contract with Tom Hall to draft a work plan/scope of work. We will be sending out a Doodle Poll to your key staff (i.e. Richard L., Naomi, Tom M. and Bill) to set a date to meet with your staff to get input on the draft so that it can be finalized. We'll target a meeting date to review the draft sometime in the next several weeks. The estimated time to complete this entire process is estimated to be around 6 to 12 months.

Let me know if any part of this recap of our discussion needs to be modified.

David R. Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)
Cell: 925-765-9616
Email: dwilliams@bacwa.org

SOLANO COMMUNITY COLLEGE CONTRACT EDUCATION PROPOSAL FOR SERVICES

Bay Area Clean Water Agencies (BACWA)

OVERVIEW

Solano Community College is pleased to submit this proposal for educational support to the Bay Area Clean Water Agencies organization as they seek to train and place the next generation of water and wastewater professionals throughout the San Francisco Bay Area.

The Objective

- Developing awareness of careers in the water/wastewater industry
- Implementing one streamlined program whereby all students can be successful
- Creating a class schedule based on student data
- Partnering with local agencies to conduct outreach
- Distributing program information through social media (LinkedIn, Facebook, and Twitter)
- Developing opportunities for personal outreach at water/wastewater agency sites

OUR PROPOSAL

Solano Community College has a long and rich history of partnership with the water/wastewater industry in the Bay Area. Many of the most successful managers and leaders in the industry began their education through the program at Solano Community College.

Solano Community College offers a unique solution for the industry. Classes are taught onsite at local plants by managers who have already been vetted through the Solano Community College faculty hiring process. These for credit classes are taught through our contract education department. By using this delivery approach, BACWA retains the highest degree of participation in the decision making and also the greatest flexibility.

Student data is tracked through a custom databased program provided by I-Tul. This data base not only allows us to manage student data, it also allows us to respond to queries, and to track student performance. Our goal is to continue with this program.

The Workforce Development and Continuing Education team is committed to supporting the BACWWE program. After transitioning leadership of effort at the College, we had positive outcomes including:

- Streamlined hiring process for adjunct instructors
- Utilization of electronic survey tools to measure student needs

- Updated collateral materials
- Completed personal outreach to agencies and industry meetings
- Regular meetings with BACWWE executive team members

Our plan is to continue to move forward with these efforts so that we can demonstrate the highest levels of student outcomes as well as customer service. Moving forward, we have a keen eye on the development and delivery of online classes so that we can grow the program throughout the state. We would also like to have a conversation about ideas for new topics of classes.

Current Solution

The BACCWE website, managed by Barbara Hockett indicates that two classes are being offered to students for the fall of 2017.

Solano Community College would like to present the following courses to be taught in lieu of current offerings:

WATR 105 Wastewater Treatment II

Units 3.0 Hours; 3.0 Lecture

Study of the elementary engineering aspects of design, operation process control, and maintenance of wastewater treatment plants and facilities.

WATR 107 Mathematics of Water and Wastewater Treatment

4.0 units; 4.0 Lecture

A study of calculations-hydraulics, chemicals, solids,-used in the design operation, process control, and maintenance of treatment plants and facilities

Monte Hamamoto is scheduled to teach WATR 105. Monte is already an adjunct faculty member for Solano Community College. Jordan Damerel is scheduled to teach WATR 107. Jordan Damerel has successfully completed the interview process as a Solano Community College adjunct.

Ideally, the classes can be located at Redwood City and Martinez.

Once these classes are scheduled, we would like to look at creating a schedule of classes for a minimum of three semesters forward.

Timeline

| Description | Start Date | End Date | Duration |
|---|------------|----------|----------|
| Re-Launch BACWWE Program | 5/1/17 | 5/1/17 | |
| Issue statement to students and agencies | 5/1/17 | 5/1/17 | |
| Work with Math & Science Dean to schedule courses and coordinate faculty scheduling | 5/1/17 | 5/5/17 | |
| Schedule math assessments | 5/1/17 | | |
| Work with human resources to finalize hiring for last interview pool | 5/1/17 | 5/5/17 | |
| Update website | 5/1/17 | 5/10/17 | |
| Implement math assessments | 5/12/17 | 7/15/17 | |
| Schedule regular meetings with BACWWE executive team | 5/12/17 | | |
| Initiate electronic surveys | 5/12/17 | 6/12/17 | |
| Site visits and outreach | 5/22/17 | 7/15/17 | |
| Classes begin | 8/31/17 | | |
| Begin outreach cycle again | 9/1/17 | | |

Cost:

One unit class \$ 3,250

Two unit class \$ 6,500

Three unit class \$ 9,750

Four unit class \$13,000

CONCLUSION

We look forward to working with the Bay Area Clean Water Agencies organization and supporting your efforts to educate your current and future workforce.

Should you have questions, please call me at 707-863-7808 or email me at Kpenwell@solano.edu

Proposal Specifics

1. Solano will review and update the linkages to the BACWWE program on the Solano College web site. Desired functionality for students visiting the BACWWE Program on the Solano web site includes but is not limited to the following:
 - a. Description of program
 - b. Online enrollment by students
 - c. Online tracking of progress by students
 - d. Listing of upcoming classes and venues
 - e. Information on industry careers and contact information for agencies
 - f. Testimony from students
 - g. FAQ's
 - h. Contact information
 - i. Record of visits to the web site
2. Solano will hold progress conference calls and/or meetings with the BACWWE Executive committee (monthly while program is being rejuvenated and quarterly thereafter) to review progress and provide opportunity for input.
3. Solano will appoint one main contact for the program who will handle all coordination issues (i.e. contracting, venue arrangements, curriculum, etc.)
4. Solano will seek out instructors and get the instructors hired to ensure that all planned classes have qualified instructors lined-up for teaching the classes. The BACWWE Executive Committee can assist in this effort by providing names of potential instructors.
5. Solano will maintain a database of all students who have taken courses through the program and will actively outreach to students to encourage completion of a certificate or associate degree.

6. Solano will ensure that all key course materials (i.e. books, workbooks, etc.) are updated and available when classes are offered. It is not necessary to provide routine student materials such as note pads, writing implements, etc.
7. Solano will develop feedback mechanisms so that BACWWE can get feedback from students who have taken classes
8. Solano will develop and update handout literature that can be provided to prospective students as needed.
9. Solano will develop a comprehensive out-reach program to ensure classes are filled. The program will be reviewed with the Executive Committee and following input will be implemented.
10. Solano will provide financial information on funding needs for future classes one year in advance so that BACWWE can invoice their members for the needed funds
11. Solano will assist the Executive committee in their outreach efforts to expand public agency funding participation in the BACWWE program.



May 15, 2017

Samantha K. Dravis
Regulatory Reform Officer and Associate Administrator
Office of Policy
U.S. Environmental Protection Agency (U.S. EPA)
Submitted electronically via www.regulations.gov

Subject: Evaluation of Existing Regulations – EPA Office of Pesticide Programs (OPP)
(EPA–HQ–OA–2017–0190)

Dear Ms. Dravis:

On behalf of Bay Area Clean Water Agencies (BACWA), thank you for this opportunity to provide input on pesticide regulations that may be appropriate for repeal, replacement, or modification. Our organization has an interest in this process because, on a recurring basis, uses of U.S. EPA-approved pesticides result in adverse impacts to water quality and to aquatic life in waters that receive urban runoff.

Bay Area Clean Water Agencies' members include 55 publicly owned wastewater treatment facilities ("POTWs") and collection system agencies serving 7.1 million San Francisco Bay Area residents. We take our responsibilities for safeguarding receiving waters seriously.

Bay Area Clean Water Agencies are especially interested in pesticides that are used by consumers for which there is a transport pathway to the sanitary sewer. Omitting or incorrectly evaluating this environmental exposure pathway can prove costly for POTWs, due to the potential for pesticides to cause or contribute to wastewater treatment process interference, NPDES Permit compliance issues, impacts to receiving waters, recycled water quality and/or biosolids reuse, in addition to exposing POTWs to the potential for third party lawsuits under the Clean Water Act.

OPP Regulatory Reform Questions

OPP has requested input from stakeholders on the following seven questions:

1. Is there a particular rule or regulatory provision in 40 CFR Parts 150-189 (pesticide regulations) that should be repealed, replaced or modified?
2. Which regulations could be updated to be less burdensome for small businesses and/or state and local or tribal governments while maintaining environmental protection?
3. Which regulations, including economically significant rules, could be transitioned from paper to electronic reporting?

4. How can EPA streamline or consolidate reporting requirements to reduce burden, including reducing the frequency of reporting, while maintaining effective programs?
5. Which regulations could be made less burdensome through the use of advance monitoring techniques to facilitate environmental protection?
6. Which regulations (or portion of a regulation) have achieved their original objective and become obsolete?
7. Which regulations are based on data, information or methods that are not publicly available or that are insufficiently transparent?

Our input responds to questions 1, 2, and 7.

Making Pesticides Regulation Less Burdensome for State & Local Governments While Maintaining Environmental Protection

Pesticides water pollution has been burdensome to local governments. Recent cases (e.g., urban runoff and wastewater pollution with diazinon, chlorpyrifos, pyrethroids, fipronil) have revealed gaps in the processes used to implement U.S. EPA's pesticide regulatory authorities. Our professional organizations have detailed the costly consequences of this water pollution in prior correspondence that is available in the U.S. EPA Reregistration and Registration Review dockets for these pesticides. Addressing these gaps through regulatory and procedural modifications would reduce burden on state and local governments while maintaining environmental protection.

While these gaps are primarily procedural, addressing them would provide greater regulatory relief than any regulatory change under existing law. Specific modifications that would provide the greatest benefit at the least cost to OPP include:

- Scientific review procedures need to be modified to completely analyze all urban pesticide uses, correctly identify exposure pathways, improve models such that they accurately estimate pesticide releases into urban runoff and municipal wastewater treatment plants. We encourage OPP to collaborate with California DPR, which has been actively engaged in examining these scientific gaps.
- Toxicity testing data requirements in 40 Code of Federal Regulations (CFR) Part 158 Subparts G and W for conventional and antimicrobial pesticides should be modified to ensure that minimum data requirements are harmonized with US EPA Office of Water testing requirements for NPDES permittees (i.e., same species, same time frames). Minimum required data sets should be sufficient to provide accurate species sensitivity distributions that are required for Endangered Species Act consultations. On its face this may appear to be an increased regulatory requirement, but it would actually lower the overall cost of the pesticides registration process by making the process more predictable and more scientifically reliable. This change would eliminate the regulatory gaps between the nation's pesticides, water, and endangered species regulatory programs that are costly and cumbersome for OPP, state and local governments, and registrants.

- Benefits Assessments should be modified to consider economic impacts on state and local governments such as costs arising from Clean Water Act compliance issues, and to include the costs of actual impacts on beneficial uses, e.g. drinking water and fisheries

It is essential that U.S. EPA's pesticide regulatory processes adequately consider – and fully mitigate – impacts to wastewater treatment processes, wastewater effluent, recycled water, and biosolids. We strongly encourage OPP to continue to work with OW toward this objective.

Regulations that Should Be Repealed or Modified

We propose that EPA repeal or modify two regulations: the treated article exemption and the elimination of requirements to provide product performance data for urban pesticide products (i.e., residential, professional, institutional, and industrial products).

A. Treated Article Exemption

40 CFR Part 152, §152.25 lists regulatory exemptions from FIFRA for pesticides “of a character not requiring FIFRA regulation.” The first exemption, §152.25 (a), known as the “treated article exemption” is overly broad and burdensome for state and local governments. Because they can leach their pesticide content during use or at end of life, treated articles definitely are of a character requiring FIFRA regulation. There is no scientific basis for this exemption

This exemption has two consequences:

1. OPP does not assess the ecological risks of end-use treated articles when it registers pesticides. This scientific omission creates an enormous gap. Many treated articles leach pesticides into urban runoff or wastewater through outdoor exposure or indoor washing, such as treated wood, paint, roofing materials, other building products, and treated fabrics. This leaching has been linked to urban pollution, e.g., pentachlorophenol, creosote, and arsenic wood treatments.
2. The exemption blocks states rights to manage pesticide treated articles. For example, states cannot control sale and use of treated wood, building materials, or clothing. In some instances, this can preclude the most cost-effective means to address water pollution.

We request that EPA repeal this scientifically unsound exemption. If EPA prefers a narrower change, we suggest that consider the following options:

- (1) Modify the exemption to allow states to register treated articles
- (2) Require registration of all treated articles with pesticides content above a de minimis threshold (e.g., 1 part per million) that allows for preservative use in personal care products like shampoo and makeup.

If it elects the latter course, OPP should modify its ecological risk assessment procedures to include a full ecological assessment of all treated articles.

B. Product performance data requirements

In 1979, US EPA adopted an overly broad regulation for conventional pesticides (40 CFR §158.400) in response to Congressional authorization to waive data requirements pertaining to efficacy for individual pesticide registration applications (FIFRA 7 U.S.C. Part 136a [c] [5] [D]). The sweeping regulation exempted not just one product, as contemplated by Congress – it exempted every product that did not make microorganism or vertebrate control claims. This broad exemption was based on arguments that information from government and industry sources and market forces would ensure users would only purchase pesticides that are efficacious. These arguments may be appropriate for the agricultural marketplace but not in the urban marketplace. Recent discoveries of the lack of efficacy of antimicrobials used in healthcare have not significantly reduced their success in the urban marketplace, revealing that in this context market forces are ineffective in ensuring that a pesticide product will perform as claimed.

This regulation should be revised to require registrants to provide product performance testing data for all urban uses (i.e., residential, professional, industrial and institutional uses). This data is critical for establishing application rates and mitigation measures that can reduce environmental impacts while still preserving the efficacy of the products.

Regulations Causing Data to Not Be Publicly Available / Insufficient Transparency

One of OPP's regulations in 40 CFR Part 152, Subpart F (§152.199) keeps data in support of pesticide registration hidden until after the decision is finalized. Our scientific reviewers have been unable to provide meaningful input to OPP on proposed new pesticide registration decisions due because this information is unavailable to us. Our local government experts, who have on-the-ground understanding of urban runoff and wastewater, can only help OPP ensure the accuracy of its assessments if they can access the scientific data crucial for OPP's decisions. For example, data characterizing leaching of pesticides from treated materials and studies of pesticides transport to drinking water intakes have been withheld from our reviewers. Our input improves the accuracy of OPP scientific assessments, thus helping OPP make better decisions that avoid costly pesticides water pollution

Thank you for your consideration of our comments. If you have any questions, please contact Karin North, 650-329-2104, Karin.north@cityofpaloalto.org.

Sincerely,



Dave Williams
Executive Director, Bay Area Clean Water Agencies

cc: Richard P. Keigwin, Jr., Acting Director, U.S. EPA Office of Pesticide Programs (OPP)
Tracy Perry, U.S. EPA OPP, Pesticide Re-Evaluation Division
Andrew Sawyers, Director, EPA Office of Water, Office of Wastewater Management



Betsy Southerland, Director, EPA Office of Water, Office of Science and Technology
Tomas Torres, Director, Water Division, EPA Region 9
Debra Denton, EPA Region 9
Patti TenBrook, EPA Region 9
Dawit Tadesse, California State Water Resources Control Board
Tom Mumley, California Regional Water Quality Control Board, San Francisco Bay Region
Janet O'Hara, California Regional Water Quality Control Board, San Francisco Bay Region
James Parrish, California Regional Water Quality Control Board, San Francisco Bay Region
Jennifer Teerlink, California Department of Pesticide Regulation
Chris Hornback, Chief Technical Officer, National Association of Clean Water Agencies
Cynthia Finley, Director, Regulatory Affairs, National Association of Clean Water Agencies
Kelly D. Moran, UP3 Partnership

Check
out our
Eco-Home



► [Sign up](#) for Bay Area
Flows e-newsletter



Residents

Businesses

Contact Us

HEALTHY BAY, HEALTHY YOU.

Preventing pollution where we live, work, and play is the "Bay-wise" way to keep the Bay and our families healthy.



[HOME](#) | [CONTACT US](#) | [ABOUT US](#) | [LOGIN](#) | [TERMS](#) | [PRIVACY STATEMENT](#)

Copyright © 2017 BACWA and BASMAA

Like 111

Tweet

Share

48

G+1 4

HEALTHY BAY, HEALTHY YOU.

Preventing pollution where we live, work, and play is the "Bay-wise" way to keep the Bay and our families healthy.

We have lots of articles to help you in the fight against pollution.

OUR STORY

This website is a collaboration between the Bay Area Clean Water Agencies' (BACWA) pollution prevention group known as the Bay Area Pollution Prevention Group (BAPPG), and the Bay Area Stormwater Management Agencies Association (BASMAA). We have come together to educate Bay Area residents and businesses about simple, cost-effective ways to protect San Francisco Bay by preventing pollution at the source.

FEATURED ARTICLES



NEWS ARTICLE TITLE

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



NEWS ARTICLE TITLE

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



NEWS ARTICLE TITLE

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

7

0 20

Comments

RESIDENTIAL

Wastewater and stormwater carry pollutants from everyday activities like cooking, gardening, maintaining your car, and even spring-cleaning your garage and medicine cabinet. We've provided a few tips that will help keep pollutants out of the Bay - and make your home safer for your family.

- Ten Easy Tips
- Your Pool, Spa & Fountain
- Renovating Your Home
- Pest Control
- Around Your Home
- In Your Home
- Your Toilet
- Your Garden



BUSINESS

Businesses - small and large - play an important role in reducing pollution in the San Francisco Bay. Just like residents, business owners and employees are responsible for ensuring their actions do not negatively impact water quality. Click on the links below for resources for how your business protect the Bay.

- Dental Office Resources
- Demolition Resources
- Plumbing Resources
- Backyard and Marina Resources



- Plumbing Resources
- Boatyard and Marina Resources
- Restaurant Resources

SIGN UP FOR BAY AREA FLOWS NEWSLETTER

Join

BAYWISE.ORG

The BayWise website is a collaboration among Bay Area wastewater, sewer and stormwater agencies to educate Bay Area residents and businesses about simple, cost-effective ways to protect San Francisco Bay by preventing pollution at the source.

Residential

- Around Your Home
- In Your Home
- Your Garden
- Your Car
- Out and About
- Ten Easy Tips
- Renovating Your Home
- Pest Control

Business

- Dental Office Resources
- Plumbing Resources
- Restaurant Resources
- Demolition Resources
- Marina & Boatyard Resources

©2017 BACWA AND BASMAA



MADE WITH DIVISION

Environmental Proficiency Testing: A Guide to Design and Implementation

Presented by Craig Huff

Considerations for PT Sample Design

- **Intended Use** – Samples must be appropriate for methods employed (quantitative and semi-quantitative methods)
- **Sample Mass/Volumes** - Providing an “excessive” amount of sample is discouraged
- **Homogenous and Stable** – Samples must be homogenous and stable for the period of study (at minimum)
- **Appropriate Challenge** – Sample design should provide an appropriate challenge to the labs under test.

Sample Design / Preparation

- Single Bulk Batch
- Post-Packaging Fortification
- Matrix + Concentrate
- Ready-to-Use vs Concentrate



Critical Design and Preparation Considerations:

- Analyte Compatibility
- Preservative/Stabilizing Agents
- Analyte Concentration vs. Stability
- Homogeneity and Stability
- Intended use – (extraction/digestion and analytical methodology)
- Ease of Use

Analyte Concentrations and Assigned Values

- Concentration ranges defined by TNI FoPT Tables
- Assigned values must be randomly selected and within TNI FoPT table concentration ranges—For each PT study
- Assigned values determined through:
 - Weights & Measures i.e. “made-to” values
 - PT provider internal analyses
 - Study mean/median
 - Must be compliant with TNI Standard/FoPT and ISO 17043
- Verification of assigned values (VHS)
 - Accuracy & precision criteria (~2x to 5x tighter than lab evaluation acceptance limits)
 - Methods employed are typically “modified” by necessity

Page 100 of 146

PT Providers- Standards and Compliance

- TNI Volume 3 and FoPT Tables
- ISO 17043 – Proficiency Testing
- ISO 17025 – Calibration Laboratory Competence
- ISO Guide 34 / 17034 – Reference Material Producers
- ISO 13528 – Proficiency Testing Statistical Methods

In the US, PT Providers are accredited by a PTPA (PT Provider Accreditor). TNI accredits PTPA's

PT Providers must also participate in and pass PT samples from external providers

Statistical Analysis and Evaluation of Population Data- Commonly Utilized Models

- NELAP (TNI)*
- Z- Scoring
- Study Consensus Approach

* Most recognized in US and focus of today's presentation

NELAP (TNI)

- Accepted by most states- wholly or in part
- Data evaluated using regression equations or fixed limits
- Information published in the TNI FoPT Tables
- NPW and SCM Acceptance Limits represent $\sim \pm 3$ standard deviations
- DW Acceptance Limits represent $\sim \pm 2$ standard deviations
- Utilizes robust mean & robust standard deviation

Mean and Standard Deviation- Robust vs Arithmetic Techniques

- Arithmetic = Simple “Average” and “Standard Deviation”
 - Used for sample sizes of 7 to 20 samples
- Robust = Multi-iterative, bi-weighted¹ mean and standard deviation
- What does “bi-weighted” really mean?
 - Begins with the median of the data population
 - Assigns a weighting factor to each data point with each iteration based on “distance” from the median
 - 15 iterations conducted
 - Utilized for sample sizes of 20 or more values
- Why use Robust technique?
 - Minimizes the effect of data outliers on the mean and standard deviation
 - 1. *“A Biweight Approach to the One-Sample Problem” - Dr. Karen Kafadar*

Outliers – Determination and Treatment

Grubb's Test (Grubbs 1969 and Stefansky 1972) is used to detect a single outlier in a univariate data set that follows an approximately normal distribution.

Grubbs' test is defined for the hypothesis:

H₀: There are no outliers in the data set

H_a: There is exactly one outlier in the data set– (*multiple iterations may be conducted*)

Test Statistic: The Grubbs' test statistic is defined as:

$$G = \frac{\max |Y_i - \bar{Y}|}{s}$$

with \bar{Y} and s denoting the sample mean and standard deviation, respectively. The Grubbs' test statistic is the largest absolute deviation from the sample mean in units of the sample standard deviation.

[Http://www.itl.nist.gov/div898/handbook/eda/section3/eda35h1.htm](http://www.itl.nist.gov/div898/handbook/eda/section3/eda35h1.htm)

Note: Outlier testing is utilized only when Arithmetic techniques are used to determine population means and standard deviations.

Used for sample sizes of 7 to 20 samples- **No more than 20% of the values in a data set may be classified as outliers.**

PT Regression Equations vs. Fixed Limits: Where do they come from and how were they derived?

- Exist within the TNI FoPT Tables (excerpt from TNI NPW FoPT table below)

| Matrix | EPA | NELAC | Analyte ^{1,2} | Conc Range | Acceptance Criteria ^{3,4,5,6} | | | | NELAC PTRL ⁷ |
|--------|---------|---------|--|------------|--|---------|--------|--------|-------------------------|
| | Analyte | Analyte | | | | | | | |
| | Code | Code | | | a | b | c | d | |
| | | | Nutrients | | | | | | |
| NPW | 0031 | 1515 | Ammonia as N | 1.0 to 20 | 0.9923 | 0.0567 | 0.0583 | 0.0914 | 0.60 |
| NPW | 0032 | 1810 | Nitrate as N | 2.0 to 25 | 0.9975 | -0.0005 | 0.0506 | 0.0642 | 1.50 |
| NPW | | 1820 | Nitrate-nitrite as N | 2.5 to 25 | 0.9957 | -0.0010 | 0.0509 | 0.0400 | 1.99 |
| NPW | | 1840 | Nitrite as N | 0.4 to 4.0 | 1.0017 | -0.0030 | 0.0377 | 0.0250 | 0.28 |
| NPW | 0033 | 1870 | Orthophosphate as P | 0.5 to 5.5 | ± 15% fixed acceptance limit | | | | 0.42 |
| NPW | 0034 | 1795 | Total Kjeldahl-Nitrogen ^{10f} | 3.0 to 35 | 0.9701 | 0.2283 | 0.0680 | 0.1906 | 1.95 |
| NPW | 0035 | 1910 | Total Phosphorus | 0.5 to 10 | 0.9932 | 0.0084 | 0.0506 | 0.0254 | 0.35 |

How are PT Acceptance Limits derived from TNI Regression Equations

- Are your results “Acceptable” or “Not Acceptable”
- For NPW... Acceptance Limits are set at ± 3 Std Dev as calculated from the “predicted mean”

Eg. Nitrite as N; $a = 1.0017$, $b = -0.0030$, $c = 0.0377$, $d = 0.0250$

Assume PT sample assigned value = 1.00 mg/L

Predicted Mean = $(1.00 \times 1.0017) + (-0.0300) = \mathbf{0.999 \text{ mg/L}}$

Predicted Std Dev = $(1.00 \times 0.0377) + 0.0250 = \mathbf{0.0627 \text{ mg/L}}$

Acceptance Limits = $0.999 \pm (3 \times 0.0627)$ or 0.811 – 1.19 mg/L

Note: Analytical method bias is accounted for where regression equations are prescribed.

Knowing Your Evaluation Range – Where's the Value?

- Helps to assess if your internal QC acceptance limits are appropriate
 - For example: Having internal QC acceptance limits of $\pm 20\%$ for a PT sample analysis that you now know will be in the $\pm 14.5\%$ range...may be problematic?
 - Reviewing PT results when they are on the upper or lower end of the TNI manufacturing range. Remember... the PT provider's assigned value must be within this range, but the evaluation range may "stray beyond"

Data Modality – What is it and how is it handled?

- Multi-modal distributions can occur where two or more data distribution scenarios are exhibited within a data set.
- Methods for detecting and treating these situations must be approved by the PT provider's Proficiency Testing Provider Accreditor (PTPA)
- When detected, the PT provider must assess the cause and segregate the data and evaluate separately...or invalidate the analyte/sample in that PT study

Some Potential Causes of Multi-Modality:

- Prep/analytical method bias (i.e., two or more methods may not be equivalent)
- PT sample(s) inhomogeneity (within and/or between the samples)
- PT sample(s) may have exhibited instability during the course of the study

PT Sample Concentration and it's impact on Acceptance Limits

- Regression-based acceptance limits: Typically change as a percentage of the assigned value over the PT concentration range (generally widen as the concentration approaches the PTRL)
- Fixed acceptance limits...need I say more

Realizing Success in Proficiency Testing- Tips and Hints

- Understand TNI FoPT tables...evaluation criteria and concentration ranges
- Double check PT sample instructions (read twice...dilute once)
- Follow your normal preparation/analytical procedures*
- Be sure to correct for any additional dilution/concentration steps performed
- Calibration standards, LCS and other internal quality control materials/protocols...know and follow your internal quality acceptance criteria
- Report your PT results with the correct units and correct analytical method. This is the number one cause of PT failure or "Revised Reports"
- Report your results before the close of the PT study
- Detection/Quantitation limits –TNI PTRL vs your LOQ?
- Ask your Accrediting body and/or PT provider if you have any questions (before the study closes)

Failed a PT -- Some Troubleshooting Tips

- - Root Cause Analysis ->Review all records:
 - Sample dilution?
 - Calibration standards?
 - Prep/analytical dilutions?
 - Sample analyzed within linear range?
 - Detection/quantitation limits?
 - Interferences?
 - Internal “QC” checks OK (ICV, CCV, Blanks)?
 - Sample storage conditions?

Monitoring and Trending PT Performance-Tools You Can Utilize

- Evaluate statistics of analyte/method/data
- PT Performance and Exception Reports
- Custom Export Generator
 - Define and save the data you want...when you want it
- Z-Scores (a powerful trending tool)
 - Know when you have opportunity for improvement—before you experience a “not acceptable” evaluation

Other Sources of Valuable Information

- TNI Website (FoPT Tables, Laboratory Accreditation, PT Program Info.)
 - www.nelac-institute.org
- ISO 17025
- ISO Guide 34 /17034
- ISO Guide 17043
- ERA
- www.eraqc.com

Thank You...Questions?



Waters

THE SCIENCE OF WHAT'S POSSIBLE.®

Permits Committee – Report to BACWA Board

Permits Committee Meetings on: 5/9/17
Executive Board Meeting Date: 5/19/17
Committee Chair: Eric Dunlavey

Committee Request for Board Action: None

Regional Water Board Staff in attendance

18 Participants representing 9 member agencies

Upcoming Permits

May – EBDA – EBDA's tentative order allows them to discontinue acute toxicity testing since their chronic test has a survival endpoint. Both [EBDA](#) and [BACWA](#) submitted letters requesting a higher chlorine residual limit at the point of compliance than the 0.0 mg/L limit in the Basin Plan. EBDA also developed a [memo](#) outlining regulatory options for a higher allowable residual. Rather than alternative implementation, the Water Board favors moving ahead with a Basin Plan amendment on Residual Chlorine (see below). Alternatively, EBDA may switch to peracetic acid if they can't get a regulatory fix for chlorine. There was also a discussion of the role of pretreatment monitoring in the Alternative Monitoring Plan.

DSRSD and Livermore – no issues.

July – North San Mateo County Sanitary District

Residual Chlorine

Most of BACWA's member agencies disinfect their effluent using chlorine. Because chlorine is monitored continuously and has an instantaneous limit, chlorine violations are the most common water quality violation (41 since agencies began reporting violations to CIWQS), and 16 of our member agencies with chlorine limits have reported chlorine residual violations to CIWQS. Because of the likelihood of exceeding the 0.0 mg/L instantaneous chlorine residual limit at some point, most agencies use a very high dose of sodium bisulfite to quench the chlorine. To avoid violations, operators routinely overdose the effluent with sodium bisulfite. For fiscal year 2018, Bay Area Agencies are purchasing 3.1 million gallons of sodium bisulfite at a cost of \$3.3 million. About a quarter of this volume is used to overdose SBS such that there will be a chemically supported justification that a chlorine residual could not exist just in case an agency's monitor happens to show an unanticipated chlorine spikes of short duration. However, even if unquenched, these spikes will be quickly attenuated and diluted in the outfall and receiving water, so this excess sodium bisulfite added to the effluent contributes no water quality benefit. The Regional Water Board is open to a Basin Plan Amendment to change the instantaneous chlorine residual limit of 0.0 mg/L. BACWA will work with Regional Water Board staff to further explore this possibility.

ELAP Update

The State Water Board has adopted the full 2016 TNI regulations with modifications to reduce the PT testing to once/year instead of twice, and the modification to allow the staffing language currently in article 9 (using CWEA and AWWA certifications in place of degrees). All of the other of stakeholders' suggested and approved modifications of the standard have now been reduced to what will amount to "clarifying language" somewhere in the regulation or guidance. ELAP will provide training workshops especially for the very small labs to go through and create a TNI compliant Lab Manual with all the templates and easy wording when aspects of the standard do not apply. Third party auditors will be used to catch ELAP up on their backlog and to help training ELAP staff that are not knowledgeable to audit on their own at this time. There will likely be a 6 year roll-out before labs are going to be required to be TNI compliant. Each lab will have 2 audits during the training phases before they would need to comply. Board members had requested that a State Lab pilot the program and try to implement it faster than six years, and the new Deputy Director of Drinking water stated that they asked State labs to do this and were told "No" because it is too much work and too expensive.

Future BACWA Lab committee meetings will discuss specific sections of the standard and share ideas/forms of the sections that the State cannot easily do for labs – training records, non-compliance records, ideas on document control that will work, etc. . BACWA will consider ways in which it can leverage economies of scale to centralize some of the workload associated with the new standard.

Nutrient Updates

- a. *DO Workshop* – Participants were pleased with the April 27-28 DO workshop, which was one of the first expert meetings that has been open to stakeholders. The scientist are investigating questions of when is DO too low for organisms, and the usefulness of functional groups vs. sentinel species for assessing the response of the

community to low DO. They are also looking at physiological responses to low DO. They are tying their investigations to modeling work that looks at the spatial and temporal variability in low DO conditions.

- b. *Nutrient Technical Workgroup (NTW)* – [Meeting](#) was held on May 4 at SFEI. These meetings take place about once per year and are an opportunity to give technical feedback to the researchers. The meeting covered prioritization of studies. The four top priority studies proposed are: 1) toxins in mussels; 2) image interpretation from the cytobot; 3) calibration of in situ sensors; and 4) synthesis of data so far. Several BACWA members are interested in moving biogeochemical field studies to a higher priority. Agencies have the option of providing funding that is directly earmarked for specific projects to ensure they proceed.
- c. *June 7 Optimization/Upgrade Workshop* – All agencies will have received their facility reports in advance of the workshop. [Registration](#) is open to all members, but since there are space constraints in the room, if too many invitees RSVP, agencies with more than one attendee may be asked to limit their attendance.
- d. *Recycled Water Survey* – All surveys have now been submitted. BACWA is working to QA the survey data with DWR staff.
- e. *Nereda* – One conclusion of the optimization and upgrade studies is that many agencies' options are driven by space limitations. Nereda is a granular activated sludge technology that works in a small footprint. AECOM is planning a demonstration facility at FSSD, and would welcome participation from other agencies as well.

Toxicity

- a. *Pacifica Permit* - Pacifica's permit with toxicity limits was adopted as proposed. The Regional Water Board did express concerns about the low limits, but staff assured them they would work with Pacifica to ensure they don't get caught in an endless TRE cycle. They also specified that they can change species mid-permit cycle.
- b. The State Water Board has proposed an updated Toxicity Plan, now called the [Toxicity Provisions for the SIP](#). They conducted a stakeholder meeting for POTWs on April 11 to answer questions, and provided an [Outreach Document](#) summarizing the Provisions. CASA is providing redlines to the State Water Board focusing on the following:
 - How IWC is established
 - How RP is determined
 - Timing of tests within a calendar month
 - What happens when agencies send a split sample to different labs with different results
 - Removing Water Board discretion on monitoring during TREs
 - Sensitive Species screeningThe SF Regional Water Board will also discuss the preliminary draft with the State Water Board about some of the more problematic provisions such as the sensitive species screening requirements. BACWA is considering collecting data to test out who would not have reasonable potential if the threshold was set at 10% effect level, and what might be a more appropriate threshold.
- c. *Toxicity Workshop* - BACWA is planning to hold a toxicity workshop during the summer of 2017. A draft agenda was circulated. Members would like staff from contract labs invited to speak.

Announcements

- a. State Water Board adopts [Beneficial Uses and Mercury Objectives](#).
- b. Baywide toxicity 303(d) listing moved to Category 3
- c. BAAQMD adoption of Rule 11-18 moved to July 2017

Next BACWA Permits Committee Meeting: Tuesday June 13, EBMUD.

.....

Fredric P. Andes, Coordinator
Barnes & Thornburg LLP
One North Wacker Drive
Suite 4400
Chicago, IL 60606
(312) 214-8310

Federal Water Quality Coalition

April 4, 2011

Improving Regulations Docket
U.S. Environmental Protection Agency
Docket Center, Mailcode 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460

RE: Comments on EPA’s Plan for Retrospective Review under Executive Order 13563, Docket No. EPA-HQ-OA-2011-0156

Dear Sir or Madam:

The Federal Water Quality Coalition (the “Coalition”) is pleased to provide the following comments on EPA’s plan for review of regulations under Executive Order 13563 (76 *Fed. Reg.* 9988 (Feb. 23, 2011), comment deadline extended at 76 *Fed. Reg.* 14840 (Mar. 18, 2011)). These comments address both EPA’s review of ongoing regulations and EPA’s plan to conduct retrospective reviews of existing regulations.

The Coalition is a group of industrial companies, municipal entities, agricultural parties, and trade associations that are directly affected, or which have members that are directly affected, by regulatory decisions made under the federal Clean Water Act. The Coalition members, for purposes of these comments, are as follows: Alcoa, Inc., American Chemistry Council, American Coke and Coal Chemicals Institute, American Forest & Paper Association, American Iron and Steel Institute, American Petroleum Institute, Association of Idaho Cities, Auto Industry Forum, Bay Area Clean Water Agencies, City of Superior (WI), Coeur D’Alene Mines Corporation, Edison Electric Institute, Freeport-McMoRan Copper & Gold, Inc., General Electric Company, Hecla Mining Company, Indiana Coal Council, Koch Industries, Inc., Mid America CropLife Association, National Association of Home Builders, NewPage Corporation, Orange County Sanitation District, Pharmaceutical EHS Sustainability Council, Rayonier Corporation, Rubber Manufacturers Association, Shell, Utility Water Act Group, Western Coalition of Arid States, Western States Petroleum Association, and Weyerhaeuser Company.

Coalition member entities or their members own and operate facilities located on or near waters of the United States. Many of these facilities operate pursuant to individual and/or general NPDES permits for discharges into those waters. Those permits include effluent limitations that are based on implementation of the requirements set forth in the Clean Water Act. The Coalition therefore has a direct interest in

.....



EPA's review of Clean Water Act regulations pursuant to Executive Order 13563.

As an initial matter, the Coalition wants to make it clear that it strongly supports the principles of regulatory review outlined in the President's Executive Order, including the following fundamental concepts:

- Estimates of costs, benefits and burdens associated with agency regulations must be considered.
- Agencies must provide the public with a meaningful opportunity to comment and a comment period should not be less than 60 days.
- Providing comment should include an open exchange of information before an Agency position is developed through a proposed rule.
- The public must have access to scientific and technical findings to be able to meaningfully comment.
- Agencies must coordinate to avoid duplicative regulation.
- The cumulative effects of regulations must be considered.
- Agencies should adopt regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public.
- Objective scientific and technological information must be used to support agency decisions.
- Agencies should engage in a retrospective review of rules.

Second, we believe that these principles must be applied to all materials that are subject to review by the Office of Management and Budget, Office of Information and Regulatory Affairs under Executive Order 12866. These materials include significant agency policy and guidance documents. (*See* March 4, 2009, Peter Orszag Memorandum for the Heads and Acting Heads of Executive Departments and Agencies, regarding Guidance for Regulatory Review.) In this regard, we should note that the FWQC is concerned about the increasing reliance by EPA on use of policies and guidance documents in situations where requirements for issuing and revising regulations should be followed instead. For instance, EPA has recently stated that States should issue binding permit limits for nutrients by "interpreting" narrative water quality criteria to derive numeric targets, instead of going through the formal rulemaking process of setting nutrient water quality standards. This will result in a case-by-case nutrient control program that is less coordinated, less consistent and less scientifically-based, and it could deprive stakeholders of adequate opportunities to comment on the basis for these binding requirements and to seek judicial review. That is not consistent with the sound science and transparency that the Administration has stated it wants to promote.

There are a number of specific regulations, policies and guidance documents – existing or planned – that the Coalition believes merit review and revision as part of EPA's compliance with the Executive Order. Below, we list each of those EPA actions and explain briefly why we think that changes are needed.



1. **Allowing Public Comment on EPA Decisions:** Under the CWA, EPA reviews and either approves or disapproves State decisions to list impaired waters, promulgate water quality standards, and issue total maximum daily loads (TMDLs). When EPA decides to disapprove a State decision, it issues a *Federal Register* notice and takes public comment on the proposed disapproval. However, when EPA decides to approve a State decision, it notifies no one, and gives the public no opportunity to comment, even though that Federal decision often has a profound impact on stakeholders, including those in the regulated community. This lack of public participation is contrary to the Administrative Procedure Act, EPA policies on public participation, and the Administration's commitment to transparency. EPA should allow for notice and public comment on its decisions to approve State regulatory actions under the CWA.
2. **Considering Biological Information in Assessing Waterbody Health:** EPA currently follows a policy of "independent applicability" in assessing the health of waterbodies for the permitting and TMDL programs. Under this policy, a water is considered "impaired" if the pollutant levels exceed any individual numeric water quality standard, even if ample biological information indicates that the fish and other aquatic life are healthy. EPA should allow States to use a "weight of evidence" approach under which all relevant information can be considered in determining the health of a waterbody.
3. **Requiring that Standards be Attainable:** EPA follows a policy of requiring States to automatically presume that every water can attain the CWA's "fishable and swimmable" goals, unless an extensive study is done that proves otherwise. Then, TMDLs and permit limits must be set to meet those goals, even if there has never been an analysis of whether those goals can actually be attained in that waterbody. That policy should be modified. States should assess waterbodies to determine what uses are actually attainable, and TMDLs and permit limits should then be set to meet those attainable standards.
4. **Assessing Waters Based on Adequate Analysis:** EPA requires States to develop a new list of impaired waters every two years. States cannot possibly perform a full assessment of every waterbody in their jurisdiction every two years. Therefore, impairment decisions are often made based on inadequate or flawed information, and are then continued on State lists for years until the State agency is able to marshal the resources to assess those waters more fully. It would improve the process if States had five years between listing cycles. That would give them time to perform better assessments, which would result in impairment decisions – and TMDLs and permit limits – that are more scientifically sound.



5. **Integrating Multiple Programs:** There are many waterbodies that are subject to regulatory requirements under both the CWA and other EPA programs, or under both the CWA and programs run by other Federal agencies. For example, some waters have sediment toxicity issues, so are listed for cleanup under Superfund or RCRA. At the same time, the sediment issues require development of TMDLs, which may conflict with the Superfund or RCRA remediation requirements. EPA has not reconciled those conflicts. The Agency should develop a policy that addresses how the differing programs will work together to ensure that acceptable environmental results are attained in the most efficient and effective way possible. In instances where another Federal agency is involved, EPA should, of course, work together with that other agency to address and resolve possible conflicts.
6. **Federal Takeover of State Water Quality Responsibilities:** Recently, EPA issued Federal water quality standards for nutrients in the State of Florida. This EPA action was an unwarranted Federal interference in an area where States have primary responsibility. In addition, the new standards lack scientific support, and will impose enormous compliance costs without adequate opportunities for regulated sources to obtain appropriate relief. EPA should withdraw the Florida standards and instead assist the State to develop State-specific standards that will address nutrient issues in an appropriate, effective and scientifically-based manner.
7. **New Test Methods:** EPA has proposed to approve a new, extremely sensitive test method for analysis of polychlorinated biphenyls (PCBs), for use in issuing permits and assessing compliance under the CWA. This method can detect PCBs at very low levels, but the Agency has not obtained an independent peer review of the method, and has not resolved the large number of scientific problems with the method that have been identified by stakeholders. Use of the method without addressing these issues would likely result in sources having to incur enormous control costs that may not be necessary; in some cases, the limits that are imposed may not even be reachable with any controls. EPA should not finalize its approval of this method unless and until it has put the method through an independent scientific review, addressed all scientific issues raised in that process, and developed (with public input) clear guidance to State agencies as to how to effectively implement PCB requirements in permits.
8. **Water Quality Trading:** While EPA has issued many statements over the years that mention water quality trading as an important element of the CWA regulatory program, the Agency has not taken tangible actions to make trading function in an effective way for more than a few watersheds around the country. This is particularly important if EPA intends for trading to be used in addressing large interstate watersheds, such as



Chesapeake Bay. EPA needs to adopt policies that will allow for and promote widespread use of trading as a means to accomplish water quality improvements while allocating control costs in an efficient and cost-effective manner among various sources.

9. **Use of Appropriate Test Methods:** EPA has proposed to adopt a rule that would require permit holders to use “sufficiently sensitive” test methods to detect and quantify the presence of various pollutants in their effluents. These methods, which can detect chemicals at very low levels, would have to be used even if they are not the most accurate or precise methods available. In some situations, methods would have to be used even if they have not gone through a rigorous EPA peer review process to verify that they are, in fact, scientifically sound. And EPA has not adequately considered the substantially greater costs of using these new methods. Similarly, EPA has recently issued guidance on other methods, for measuring “whole effluent toxicity,” that can lead to these methods being used in the permitting process, even though they often find toxicity where it does not really exist. EPA should reconsider these actions; test methods should only be used if they are valid and appropriate, so that permitting and enforcement decisions are always based on sound science.

The FWQC appreciates the opportunity to submit these comments on the Agency’s plan for regulatory review. We look forward to continuing to work with EPA, the States and other stakeholders to address critical Clean Water Act regulatory issues moving forward into the future. Please feel free to call or e-mail if you have any questions, or if you would like any additional information concerning the issues raised in these comments.

Fredric P. Andes
Coordinator



Federal Water Quality Coalition

May 15, 2017

Office of Policy - Docket
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Comments on Request for Comment: Evaluation of Existing Regulations,
No. EPA-HQ-OA-2017-0190

Dear Sir or Madam:

The Federal Water Quality Coalition (“FWQC” or the “Coalition”) appreciates the opportunity to file comments with EPA regarding the Agency’s Request for Comment on Evaluation of Existing Regulations. That evaluation is being conducted pursuant to Executive Order 13777. The Request for Comment was issued in the *Federal Register* on April 13, 2017 (82 *Fed. Reg.* 17793).

The FWQC is a group of industrial companies, municipal entities, agricultural parties, and trade associations that are directly affected, or which have members that are directly affected, by regulatory decisions made by the EPA and States under the federal Clean Water Act (CWA). The FWQC membership includes entities in the aluminum, agricultural, automobile, chemical, coke and coal chemicals, electric utility, home building, iron and steel, mining, municipal, paper, petroleum, pharmaceutical, water/wastewater, rubber, and other sectors. FWQC members, for purposes of these comments, include: Arconic Inc. (f/k/a Alcoa, Inc.); American Chemistry Council; American Coke and Coal Chemicals Institute; American Forest & Paper Association; American Iron and Steel Institute; American Petroleum Institute; Association of Idaho Cities; Auto Industry Water Quality Coalition; Bay Area Clean Water Agencies; Bristol-Myers Squibb; City of Superior (WI); Edison Electric Institute; Eli Lilly and Company; Freeport-McMoRan Inc.; General Electric Company; Hecla Mining Company; Indiana Coal Council; Kennecott Utah Copper LLC; Metropolitan Water Reclamation District of Greater Chicago; Mid America CropLife Association; National Association of Home Builders; National Oilseed Processors Association; Orange County (CA) Sanitation District; Pavement Coatings Technology Council; Rubber Manufacturers Association; Shell; Treated Wood Council; Utility Water Act Group; Western Coalition of Arid States; and Western States Petroleum Association.



FWQC member entities or their members own and operate facilities located around the country. Those facilities operate pursuant to NPDES permits that impose control requirements with respect to wastewater discharges. Those control requirements are shaped by regulations and guidance that EPA issues under the Clean Water Act (“CWA”) and State actions that implement those Federal policies. The FWQC therefore has a direct interest in EPA’s evaluation of its Clean Water Act regulations under Executive Order 13777.

As an initial matter, it is important to note that the FWQC has laid out its views before as to review of EPA regulations and appropriate changes to those regulations. In 2011, pursuant to Executive Order 13563, EPA asked for comments on those topics. The FWQC provided comments on April 4, 2011 (copy attached). Those comments laid out general principles that should be followed in adopting and revising regulations (which apply as much now as in 2011), and recommend specific actions that EPA should take as to particular Agency regulations and decisions. Unfortunately, most of the concerns set forth by the FWQC in those comments have not been effectively addressed. Therefore, we ask that EPA review those recommendations again, and then take action on those issues.

Beyond the issues set forth in our 2011 comments, we have consulted with our members as to other challenges that they are currently facing in complying with EPA requirements under the CWA. Based on our review of those requirements, we have identified the following issues that EPA should address.¹ In each case, we set forth our recommendation as to how the Agency should address the concerns.

- 1. CONDUCTIVITY GUIDANCE:** EPA has issued draft guidance on development of water quality criteria for specific conductivity². The draft guidance rests on a flawed scientific basis, and would impose enormous compliance costs.³ EPA should withdraw the draft guidance.

¹ Beyond the issues listed below, we are aware that EPA has already begun the process of reconsidering its rule concerning the definition of “waters of the United States” or “WOTUS”. We did not list that issue here because the reevaluation process is already underway. The FWQC submitted comments setting forth serious concerns regarding the WOTUS rule when proposed, which are found in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2011-0880-15822> . We strongly support EPA’s decision to address the concerns that have been expressed regarding that rule.

² The EPA draft guidance is found at <https://www.epa.gov/wqc/draft-field-based-methods-developing-aquatic-life-criteria-specific-conductivity> .

³ The FWQC’s scientific concerns are spelled out in its comments, which are in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2016-0353-0080> .



2. **SELENIUM GUIDANCE:** EPA issued new recommended water quality criteria for selenium, which focus appropriately on selenium levels in fish tissue, but then issued draft implementation guidance⁴ that ignores the fish-tissue focus and instead concentrates on water column levels, without any scientific basis for the change.⁵ The draft guidance should be withdrawn and revised to be consistent with the EPA criteria, and then reissued for public review and comment.
3. **HUMAN HEALTH STANDARDS:** EPA has pressed States to issue new, very stringent water quality standards to protect human health with regard to fish consumption, and has in some cases overruled States and issued the standards itself.⁶ The new standards are based on policy changes that have been made without following proper notice-and-comment procedures, utilize new interpretations of the Clean Water Act and Tribal treaties that are without legal basis, and are based on questionable scientific assumptions.⁷ As a result, the new standards will impose tremendous compliance costs without any significant benefit to public health. EPA should reconsider its decisions as to these new standards, and should make new decisions that are based on proper scientific, legal and policy foundations and that pay appropriate deference to the primary role of States under the CWA in setting water quality standards.
4. **TEST METHODS:** Test methods are getting more and more sensitive, resulting in detection of many compounds at extremely low levels. Combined with the new human health standards referenced above, this can result in regulated parties having to make major capital investments in order to make small reductions in pollutant levels that make no significant difference in water quality. EPA issued final rules to

⁴ The EPA guidance documents are found at <https://www.epa.gov/wqc/aquatic-life-criterion-selenium>.

⁵ The FWQC comments explaining these concerns are located in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2016-0551-0031>.

⁶ For example, EPA issued its own standards in Washington State and Maine. Those decisions are found at <https://www.gpo.gov/fdsys/pkg/FR-2016-11-28/pdf/2016-28424.pdf> (Washington State) and <https://www.epa.gov/wqs-tech/promulgation-certain-federal-water-quality-standards-applicable-maine> (Maine).

⁷ These concerns are expressed in further detail in the FWQC comments, which are found in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0174-0275> (Washington State) and <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0804-0352> (Maine).



address detection and quantification issues late in 2016, but those rules were withdrawn from the Federal Register by the new Administration.⁸ EPA should reexamine those rules, consider modifications to more fully address detection and quantification concerns,⁹ and reissue the rules for public comment.

5. **RELIEF MECHANISMS:** With the trend toward ever-stricter water quality standards (see items 1-3 above) and the improvements in test methods yielding detections at lower levels (see item 4 above), there are more and more situations in which standards and permit limits are forcing dischargers to spend enormous amounts to reduce their effluents to extremely low levels, often for very little additional benefit to water quality. In some cases, the reductions are simply not attainable, or, if attainable, are not close to being affordable for businesses and for ratepayers. While EPA allows States to adopt certain relief mechanisms, such as variances, these regulatory tools have, in practice, been difficult to use – in some cases, agencies refuse to allow their use at all. EPA should revisit its policies regarding these relief mechanisms, to ensure that they are practically available when needed.
6. **PERMIT UPDATE RULE:** EPA has proposed changes in the rules that govern issuance of NPDES permits.¹⁰ In its comments on that proposal,¹¹ the FWQC identified serious concerns with a number of provisions, including the Agency's claim of new authority (which does not exist in the CWA) to veto and reissue State-issued administratively-continued permits, and the new provisions governing dilution allowances and concerning "reasonable potential" determinations for new dischargers. These issues should be addressed before EPA takes any action to move forward with final changes to the NPDES regulations.
7. **STORMWATER PERMITS:** In issuing permits for stormwater discharges, and in overseeing issuance of stormwater discharges by States, EPA has dictated new requirements that are not justified by water quality concerns, that are often infeasible to meet, and that go beyond the Agency's authority, by regulating water flow instead of actual pollutants. EPA should reevaluate and revise those requirements, to focus

⁸ The EPA final rules and related information are found at <https://www.epa.gov/cwa-methods/methods-update-rule-2016>.

⁹ Suggested changes to address these concerns were laid out in the FWQC comments on the proposed rules, which are in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2014-0797-0269>.

¹⁰ The EPA proposal is found at <https://www.epa.gov/npdes/npdes-application-and-program-updates>.

¹¹ The FWQC comments are found in the EPA docket at <https://www.regulations.gov/document?D=EPA-HQ-OW-2016-0145-0182>.



on practical steps that can be taken to address actual water quality problems caused by the discharge of pollutants.

- 8. WHOLE EFFLUENT TOXICITY:** EPA has imposed whole effluent toxicity (“WET”) requirements in permits (including requiring use of the Test of Significant Toxicity (“TST”) statistical endpoint for WET testing) without going through proper CWA procedures, and has structured those requirements in rigid, inflexible ways. EPA should withdraw those requirements and follow required procedures before including WET provisions in permits. When WET provisions are included, the test results should be applied in a flexible manner, as triggers for action, rather than as rigid numeric limitations.
- 9. TOTAL MAXIMUM DAILY LOADS (“TMDLs”):** EPA has followed a number of questionable practices in developing and implementing TMDLs, including: (1) developing its own “numeric interpretations” of State narrative criteria and using them to impose numeric effluent limitations, without requiring (or even allowing) States to follow the rulemaking process to adopt new numeric standards; (2) issuing permits that are inconsistent with approved TMDLs, based on a belief that the TMDLs are “flawed” and should be disregarded; and (3) refusing to let States remove TMDLs (and their allocations) if a waterbody meets water quality standards. Each of these practices should be changed, by issuance of new Agency policy.
- 10. REGULATION OF GROUNDWATER:** A number of courts have recently ruled – using a newly-discovered “conduit theory” - that discharges to groundwater can sometimes require permits under the Clean Water Act, even though the Act was clearly not intended to apply to groundwater. EPA policy statements on this issue have been vague and inconsistent. EPA should issue a new policy that clearly states that the Act applies only to discharges directly into surface water, and that discharges to groundwater do not require NPDES permits, regardless of whether the groundwater eventually connects to a surface waterbody.
- 11. PERMIT AS A SHIELD:** Recent court decisions have created some uncertainty as to whether a discharger is fully insulated from liability if it operates in compliance with the provisions of its Clean Water Act permit. EPA should revisit its policy on the “permit as a shield” issue, to ensure that if a discharger submits a proper application, and then operates in compliance with its permit, it is not held liable for discharges that were considered by the agency during the permitting process.
- 12. CWA/ENDANGERED SPECIES CONSIDERATIONS:** EPA has allowed the Fish and Wildlife Service and National Marine Fisheries Service to exercise significant influence over permitting and regulatory decisions made under the Clean Water Act, based on an improper and unduly broad reading of the Services’ legal authority under the Endangered Species Act (“ESA”). EPA



should revisit this approach, and should ensure that the Services exercise this authority only when EPA actions could have an adverse impact on endangered species. EPA actions that are expected to lead to improvements in water quality, which are being reviewed by the Services under the existing approach, are outside of ESA authority and should not be second-guessed by the Services.

The FWQC appreciates the opportunity to submit these comments concerning EPA's evaluation of existing regulations under Executive Order 13777. Please feel free to call or e-mail if you have any questions, or if you would like any additional information concerning the issues raised in these comments.

Fredric P. Andes
Coordinator



Committee Request for Board Action: Provide BACWA Comments on Intended Use Plan, due 5/22

Detailed notes from meetings are posted [online](#).

14 attendees (including 6 on phone) representing 7 member agencies

State Revolving Fund Intended Use Plan

WaterReuse met with State Division of Finance on March 9 ([see notes](#)) to discuss funding for recycled water since there are a lot of projects in Group 3 that are not currently slated to receive support. WaterReuse provided a proposal for funding priorities, which are:

1. DACs
2. Communities with CDOs
3. Multiple benefits projects
4. Ready to proceed projects
5. Volume of anticipated recycled water delivery

There was a concern that the fifth priority would skew funding to larger projects, and therefore Southern California agencies. This will be further discussed at the WaterReuse governing board. The Recycled Water committee would like to provide its own feedback separately from WaterReuse via a comment letter. The State Water Board will also need to hear from agencies on whether there is enough interest in the Recycled Water Community to justify issuing new Bonds.

Building Standards for Recycled Water Systems (AB 2282)

AB 2282 requires department of housing and community development (HCD) and the building standards commission (BSC) in consultation with the SWRCB and other interested parties to conduct research and assist in developing mandatory green building standards for recycled water systems in newly constructed residential, commercial, and public buildings and building site landscaped areas. Such standards must be adopted during the 2016 Intervening Code Adoption Cycle.

The California Advisory Committee recommended that California Building Standards Commission withdraw the indoor element of AB 2282 mandate and focus solely on mandatory standards for outdoor recycled water use for landscape irrigation for newly constructed residential and non-residential developments.

AB 574 (Quirk Bill)

See [State Water Board Presentation](#). There are concerns in the recycled water community that the stakeholder process is not sufficiently robust. State Water Board staff are seeking feedback on the following:

- What has changed in the last 8 years that might result in an update to a specific area of the Policy?
- What aspects of the Policy are most effective as currently written?
- What are some challenges to implementation of the current Policy? What could be some potential updates to address those challenges?

Next Meeting – July 11, 2017 from 10:00 am to 12:00 pm, 2nd Floor Small Training Room at EBMUD Headquarters. After this, the committee will switch to meeting on the second Tuesday of odd months.



Executive Director's April 2017 Report

NUTRIENTS:

Completed a variety of tasks and activities associated with BACWA's interests on nutrients and collaborating with the Water Board including:

- Attended and participated in the 25th meeting of the NMS Planning Subcommittee and provided BACWA in-kind services by serving as scribe. Following the meeting prepared detailed meeting minutes and summary of action items.
- Coordinated with the OP/Upgrade consulting team on administrative issues.
- Provided updates to the WB staff on the progress on reaching consensus on an approach to the 2nd Watershed Permit.
- Coordinated with the NMS Science Manager on presentations, meetings, and key issues on nutrients.
- Provided an interview to the League of Women Voters for their Bay Area Monitor publication.
- Chaired the monthly CMG meetings with the main topic being the review of the progress on the Optimization/Upgrade studies and the agenda for the Nutrient Workshop in June.
- Attended the EBMUD Sidestream Treatment briefing to the EPA.

BACWA BOARD MEETING AND CONFERENCES:

- Worked with staff in preparing for the April BACWA Board meeting including reviewing the agenda with the Board Chair.
- Continuing to track all action items to completion.
- Planned for and attended the April monthly Board Meeting.

ASC/SFEI:

- As a member of the Executive Committee, coordinated with SFEI Executive Director on Board activities.

FINANCE:

- Reviewed the monthly BACWA financial reports with the AED.
- Continued coordinating with the AED in tracking the revenues coming in from the BACWA FY 17 member invoices.
- Worked with the AED to finalize the BACWA FY 18 budget and 5 Year Plan.
- Presented the final FY 18 budget and 5 Year Plan at the April Board meeting.

PERMIT COMMITTEE:



BACWA
BAY AREA
CLEAN WATER
AGENCIES

Executive Director
April 2017 Report

- Coordinated with the RPM for items to agendaize for the Permit Committee review.
- Attended the April Permit Committee Meeting discussing upcoming permits and provided an update on the NMS.
- Attend the RWQCB meeting where BACWA testified on the Pacifica NPDES permit.

COLLABORATIONS:

- Serving as a member of the CASA Nomination Committee for new Board members and participated in conference calls for establishing the new slate of officers in CASA.
- Coordinated with CASA Regulatory Program Manager on regulator issues of mutual concern.
- Participated in a conference call with DC Water to discuss their efforts on optimization.

AIR COMMITTEE:

- Coordinated with the AIR Committee leadership on responding to proposed regulations on health risk assessments.

WOT

- Participated in conference calls to help the BACWWE group reorganize after the departure of the chair of WOT.
- Arranged for a general membership meeting of the WOT sponsors.

ADMINISTRATION:

- Held the monthly BACWA staff meeting to coordinate and prioritize activities.
- Signed off on invoices, reviewed correspondence, prepared for upcoming Board meeting, responded to inquiries on BACWA efforts, oversaw updating of web page and provided general direction to BACWA staff.
- Worked with the RPM in the preparation of the monthly BACWA bulletin.
- Coordinated with the AED to plan activities and review duties, schedules, and priorities.
- Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.

MISCELLANEOUS MEETINGS/CALLS:

- Paul Gilbert Snyder on Prop 84
- BACWA Chair and Committee Chairs on items that arose during the month
- Water Board staff on coordinating the nutrient activities
- other misc calls and inquiries regarding BACWA activities
- participated in coordination calls with the HDR project manager
- responded to Board members requests for information



BACWA BOARD CALENDAR
May 2017 to April 2018

| DATE | AGENDA |
|------------------|---|
| 6/7/2017 | Nutrient Optimization/Upgrade Workshop #2 Pagano; Ervin; Connor; White; Schectel Optimization/Upgrade Studies Williams; Fono Water Board |
| 6/16/2017 | Consent Previous Board Meeting Minutes (AED) Monthly Financial Report Monthly Board Mtg Items due: 6/9 Pagano; Ervin; Connor; White; Schectel Williams; Fono; Hull Authorizations & Approvals Approval: FY18 Agreements Other Business - POLICY/STRATEGIC Discussion: Draft Agenda WB Joint Meeting Other Business - OPERATIONAL Reports Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Other BACWA Representative Reports |
| 7/?/2017 | Joint Meeting - Water Board Items due: Pagano; Ervin; Connor; White; Schectel Williams; Fono Other Business: Discussions |
| 7/21/2017 | Consent Previous Board Meeting Minutes (AED) Monthly Financial Report Monthly Board Mtg Items due: 7/14 Pagano; Ervin; Connor; White; Schectel Williams; Fono; Hull Authorizations & Approvals Approval: Annual Nutrient WS Payment Approval: FY18 Agreements Other Business - POLICY/STRATEGIC Discussion: Draft Agenda Pre-Pardee Technical Seminar Discussion: Risk Reduction Update Discussion: Water Board Jt Mtg Debrief Other Business - OPERATIONAL Reports Committee Reports (Committee Chairs) Board Reports (Executive Board) |

ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

8/18/2017 Consent

Monthly Board Mtg

Items due: 8/11

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion: HDR Quarterly Update on Optimization/ Upgrade studies
Discussion: Draft Agenda & Schedule Pre & Pardee Technical Seminar
Discussion: Draft Agenda WB Joint Meeting
Discussion: RMP & NMS Update (Phil Trowbridge/David Senn)
Discussion: Risk Reduction Update
Discussion: Pesticides Update (Kelly Moran)

Other Business - OPERATIONAL

Discussion: FY18 Arleen Navarret Award

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

9/15/2017 Consent

Monthly Board Mtg

Items due: 9/8

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Approval:

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Pardee Technical Seminar
Discussion: Annual Meeting Planning

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

9/15/2017

Pre-Pardee Mtg

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

10/26-27/2017

Pardee Technical Seminar

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

11/17/2017 Consent**Monthly Board Mtg**

Items due: 11/10

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: Adoption of FY16 Annual Reports

Approval: Finalize next Calendar Year meeting dates

Other Business - POLICY/STRATEGIC

Discussion: Pardee Debrief & Survey

Other Business - OPERATIONAL

Discussion: Annual Meeting Planning

Discussion: Biannual Update on CASA Climate Change Prog (SDeslauriers)

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

12/15/2017 Consent**Monthly Board Mtg**

Items due: 12/8

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

HOLIDAY LUNCH

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals**Other Business - POLICY/STRATEGIC**

Discussion: Draft Agenda Joint Meeting with WB

Other Business - OPERATIONAL

Discussion: Annual Meeting Agenda

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

12/?/2017**Joint Meeting - Water Board**

Items due:

Pagano; Ervin; Connor; White; Schectel

Williams; Fono

Other Business: Discussions

SNMP

1/?/2018**Annual Members Mtg**

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

RMP & NMS Update (Phil Trowbridge/David Senn)

| | |
|--|--|
| <p>2/?/2018</p> <p>Monthly Board Mtg</p> <p>Items due: 2/?</p> <p>Pagano; Ervin; Connor; White; Schectel</p> <p>Williams; Fono; Hull</p> | <p><u>Consent</u></p> <p>Previous Board Meeting Minutes (AED)</p> <p>Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> <p>Approval:</p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: WB Joint Meeting Debrief</p> <p><u>Other Business - OPERATIONAL</u></p> <p>Discussion: FY2019 Budget Planning</p> <p>Discussion: Annual Meeting Debrief</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs)</p> <p>Board Reports (Executive Board)</p> <p>ED Report (ED)</p> <p>RPM Report (RPM)</p> <p>Other BACWA Representative Reports</p> |
|--|--|

| | |
|--|--|
| <p>3/?/2017</p> <p>Joint Meeting</p> <p>Items due: 3/?</p> <p>Pagano; Ervin; Connor; White; Schectel</p> <p>Williams; Fono</p> | <p><u>Other Business: Discussions</u></p> |
|--|--|

| | |
|--|---|
| <p>3/?/2017</p> <p>Monthly Board Mtg</p> <p>Items due: 3/?</p> <p>Pagano; Ervin; Connor; White; Schectel</p> <p>Williams; Fono; Hull</p> | <p><u>Consent</u></p> <p>Previous Board Meeting Minutes (AED)</p> <p>Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: WB Joint Meeting Debrief</p> <p>Presentation: CPSC Update (Heidi Sanborn)</p> <p><u>Other Business - OPERATIONAL</u></p> <p>Discussion: Second Draft of FY19 Budget</p> <p>Discussion: Update on BARR Taskforce</p> <p>Discussion: Update on regional and statewide biosolids issues</p> <p>Discussion: Biannual Update on CWCCG (SDeslauriers)</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs)</p> <p>Board Reports (Executive Board)</p> <p>ED Report (ED)</p> <p>RPM Report (RPM)</p> <p>Other BACWA Representative Reports</p> |
|--|---|

| | |
|--|--|
| <p>4/?/2017</p> <p>Monthly Board Mtg</p> <p>Items due: 4/?</p> <p>Pagano; Ervin; Connor; White; Schectel</p> | <p><u>Consent</u></p> <p>Previous Board Meeting Minutes (AED)</p> <p>Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> |
|--|--|

Williams; Fono; Hull

Approval: FY19 Budget

Other Business - POLICY/STRATEGIC

Discussion:

Other Business - OPERATIONAL

Discussion: Update on BAAQMD Regulations

Discussion: Update on regional and statewide biosolids issues

Discussion: CASA Climate Change Program

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

5/?/2018

Joint Meeting - Water Board

Other Business: Discussions

Items due: 5/?

Pagano; Ervin; Connor; White; Schectel

Williams; Fono

5/?/2018

Consent

Monthly Board Mtg

Items due: 5/?

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: FY18 Consulting Amendments/Agreements

Approval: Officers: Chair & Vice-Chair

Approval: BACWA Reps to ASC/SFEI Governing Board

Authorization: Legal Support Amendments

Other Business - POLICY/STRATEGIC

Discussion: Water Board Jt Mtg Debrief

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

**CURRENTLY
UNSCHEDULED
& SIGNIFICANT**

- * BACWA Membership Engagement Opportunities
- * Tech Seminar/Workshop: CCCSD Cogen explosion need to schedule
- * SFPUC force main leak and repair, need to schedule
- * Chlorine Residual Analyzer Investigation
- * Suggestions for Monthly Meeting Guest Speakers/Presenters: i.e. Jim McGrath, State Water Board
- * ELAP Certification Standards - review when released
- * BARR Taskforce Message Consensus
- * PPIC Sponsorship -review



BACWA ACTION ITEMS

| Number | Subject | Task | Deadline | Status |
|--|---------------------------------|---|-----------|-----------|
| Action Items from April 21, 2017 BACWA Executive Board Meeting | | | | |
| 2017.4-63 | Move items to May Agenda | Meeting Format, Annual Meeting Date (AED) | 4/30/2017 | completed |
| 2017.4-62 | Basin Plan Staffer | mentioned by Mike Connor (\$100,000/3) - add to May agenda (AED) | 5/31/2017 | completed |
| 2017.4-61 | BAAQMD | Provide Board with CCCSD's studies on impact of Rule 11-18 (RPM) | 5/31/2017 | |
| 2017.4-60 | BAAQMD | Provide the Board with priority action items coming out of the BAAQMD meetings and set follow-up meeting (ED/RPM) | 5/31/2017 | |
| 2017.4-59 | State Toxicity Provisions | Provide proposed redlines to Permits Committee (RPM) | 5/31/2017 | |
| 2017.4-58 | NMS Technical Workshops | Report from SFEI on workshops (ED) | 6/30/2017 | |
| 2017.4-57 | Nareda Technology | Put information in Bulletin (RPM) | 5/10/2017 | completed |
| 2017.4-56 | Nareda Technology | Contact ReNUWIt for suggestions on future moves (ED) | 5/31/2017 | |
| 2017.4-55 | 2nd Watershed Permit | Obtain LOI from Water Board for approach (ED) | 5/31/2017 | |
| 2017.4-54 | 2nd Watershed Permit | Obtain statement of support from EPA for approach (ED) | 5/31/2017 | |
| Action Items Remaining from Previous BACWA Executive Board Meetings | | | | |
| 2017.2-42 | Toxicity | Organize a toxicity workshop (Permit/Lab/EPA) (RPM) | 4/30/2017 | pending |
| 2017.2-40 | Codiga Resource Recovery Center | Incorporate into W/S Permit negotiations (ED) | 6/30/2017 | pending |
| 2017.2-38 | Science Funding | Continue to contact members to get input (ED) | 4/30/2017 | pending |
| 2016.3-61 | Membership Policy | Develop policy for out of region agency membership (ED) | 4/30/2017 | pending |

FY17: 53 of 63 Action Items completed.
 FY 16: 96 of 97 Action Items completed.
 FY 15: 90 of 90 Action Items completed.
 FY 14: 128 of 128 Action Items completed.
 FY 13: 67 of 67 Action Items completed.



Regulatory Program Manager's Report to the Board

April 2017

NUTRIENT SUPPORT: Contacted agencies that had not yet responded to the Recycled Water and CIP surveys. Posted Layman's Nutrient Presentation to website.

BACWA BULLETIN: Completed and distributed April Bulletin. Drafted May Bulletin.

TOXICITY: Reviewed preliminary draft of State Toxicity Provisions. Attended meeting with State Water Board staff. Disseminated information to Permits Committee. Participated in CASA call on provisions. Provided BACWA redlines to add to CASA redlines on Toxicity Provisions. Developed draft agenda for Toxicity Workshop.

CECs: Worked with AXYS to distribute data from SFEI-coordinated voluntary CECs study. Contacted member agencies to solicit participation in RMP microplastics study.

BENEFICIAL USES: Reviewed updated Provisions from State Water Board. Participated in calls with other CASA members and State Water Board staff on changes. Reviewed proposals on language changes from other CASA members. Discussed provisions with tribal representative.

303(d) LIST: Drafted Testimony recommending moving toxicity listing to Category 3.

MEMBER TENTATIVE ORDERS: Submitted comment letter on chlorine residual requirements for EBDA's TO. Developed testimony for toxicity provisions in Pacifica's permit.

CASA REGULATORY WORKGROUP: Participated in Conference Call and gave Regional Association update for BACWA.

COMMITTEE SUPPORT:

AIR – Drafted BAR for Carollo Change of Scope. Delivered final 3/23 meeting summary to BAAQMD staff.

BAPPG – Attended meeting and drafted Board report. Met with Computer Courage to discuss design preferences for baywise.org.

Biosolids – Followed up with agencies to correct and complete survey data.

Collection Systems - Drafted Board Report. Contacted Regional Water Board staff to attend next meeting.

O&M Infoshare – Discussed scheduling next meeting with Chair.

Permits – Drafted agenda, attended meeting, and drafted Board Report.

Recycled Water – Met with DWR staff on Recycled Water Survey QA/QC.

Executive Board – Assisted in preparing agenda and packet, and attended 4/21 Executive Board meeting. Drafted agenda for 5/5 Joint meeting with RWB staff. Compiled list of agencies that send a representative to the Collection Systems Committee meetings.

Staff Meeting – Discussed BACWA administration and planned Executive Board meeting.

MEETINGS ATTENDED: BAPPG (4/5), Meeting with Computer Courage on Baywise.org upgrade (4/5), Meeting with State Water Board on Toxicity Provisions (4/11), Permits Committee (4/11), Regional Water Board Hearing (4/12), CASA Regulatory Workgroup (4/13), Staff meeting (4/13), CASA Toxicity Workgroup Call (4/18), Meeting with DWR on Recycled Water Survey (4/18), Executive Board meeting (4/21), Two CASA calls on Beneficial Uses and Mercury Provisions (4/23), CASA calls on Beneficial Uses and Mercury Provisions (4/26), Call with State Water Board Staff on Beneficial Uses and Mercury Provisions (4/27).

Sherry Hull

From: Sherry Hull
Sent: Tuesday, May 16, 2017 12:36 PM
To: Sherry Hull
Subject: FW: agenda item # 20.c - Summit Meeting May 30th

From: Bobbi Larson [<mailto:blarson@casaweb.org>]
Sent: Monday, May 15, 2017 9:26 AM
To: Debbie Webster <eoofficer@cvcwa.org>; David Williams <dwilliams@bacwa.org>; Elizabeth Allan <EAllan@cwea.org>; Steve Jepsen <sjepsen@dudek.com>
Cc: Cheryl Mackelvie <cmackelvie@casaweb.org>; Adam Link <alink@casaweb.org>; gkester@casaweb.org
Subject: Re: CW Summit Meeting May 30th

I have extended an invitation. We'll see...

From: Debbie Webster <eoofficer@cvcwa.org>
Date: Friday, May 12, 2017 at 5:07 PM
To: Roberta Larson <blarson@casaweb.org>, Dave Williams <dwilliams@bacwa.org>, Elizabeth Allan <EAllan@cwea.org>, Steve Jepsen <sjepsen@dudek.com>
Cc: Cheryl Mackelvie <cmackelvie@casaweb.org>, Adam Link <alink@casaweb.org>, Greg Kester <gkester@casaweb.org>
Subject: RE: CW Summit Meeting May 30th

We may think about inviting Joaquin Esquivel, the newest SWB member. Not sure of his short notice schedule.

From: Bobbi Larson [<mailto:blarson@casaweb.org>]
Sent: Friday, May 12, 2017 3:05 PM
To: Dave Williams <dwilliams@bacwa.org>; Elizabeth Allan <EAllan@cwea.org>; Steve Jepsen <sjepsen@dudek.com>; Debbie Webster <eoofficer@cvcwa.org>
Cc: Cheryl Mackelvie <cmackelvie@casaweb.org>; Adam Link <alink@casaweb.org>; Greg Kester <gkester@casaweb.org>
Subject: CW Summit Meeting May 30th

Colleagues,

The next Clean Water Summit meeting is scheduled for May 30th in Sacramento. I apologize for not convening an agenda planning call (I have been on vacation for a couple of weeks). I will work with Greg and Adam to put together a draft agenda and circulate it; please let us know if there are any items of particular interest, if your association would like to make a presentation or if you would like to invite a speaker (who might join us on short notice.)

A few agenda Items we have already identified:

Drought/Climate Change Impacts on Collection Systems

-

Proposed PPIC Research Project

-

Water Conservation Impact Index

Status Update on Advancing the Utility of the Future in CA

-

Utility Info Sharing Website

-

Research on Fire Ravaged Lands

-

Day in the District

Thanks,

Bobbi

Bobbi Larson

Executive Director

CASA

1225 8th St, Suite 595

Sacramento, CA 95814

Office : 916.446.0388 ext 101

Cell : 916.798.7488



www.casaweb.org



www.facebook.com/casacleanwater



[@casa_cleanwater](https://twitter.com/casa_cleanwater)

Wadeable Streams Nutrient Objectives

Science Panel Draft Charge Questions

April 19-20, 2017

Meeting Location: SCCWRP Offices, Large Conference Room,

3535 Harbor Blvd., Suite 110, Costa Mesa CA 92626

Teleconferencing Available—Information to Be Posted on the Water Board Webpage

www.waterboards.ca.gov/water_issues/programs/biostimulatory_substances_biointegrity/science_panel/

CONTEXT: The State Water Resources Control Board (State Water Board) is proposing to adopt a statewide water quality objective for Biostimulatory Substances (including nutrients) and a program to implement it as an amendment to the Water Quality Control Plan for Inland Surface Water, Enclosed Bays and Estuaries of California (ISWEBE Plan). As a part of this policy, the State Water Board intends to establish a Biointegrity Assessment Implementation Plan. Collectively, these components are hereto referred to as the “Biostimulatory-Biointegrity Project.” During the first phase, State Water Board staff intends to establish the policy specifically for wadeable streams. A Science Plan has been developed that articulates the conceptual approach and technical activities that will support the SWRCB’s Biostimulatory-Biointegrity Project. This is the 6-member, independent Panel that will review the science supporting the Water Board’s policy.

The first Science Panel meeting in the Spring of 2017 will focus on reviewing the overarching Science Plan to support the SWRCB staff’s preferred regulatory approach. The second meeting (summer) will review interim products and discuss the science implications of SWRCB staff preliminary strategies for implementation. The third meeting will focus on the final technical products of the Science Plan and continue the discussion of science needs and implications of strategies for implementation of the combined policy.

MEETING GOAL: Review and provide feedback on the Wadeable Streams Science Plan to support the State Water Board’s Biostimulatory-Biointegrity Project.

FINAL SAP MEETING AGENDA

Day 1 (April 19, 2017)

| | | |
|-------------|---|--|
| 8:45 – 9:15 | Breakfast | |
| 9:15 – 9:30 | Introductions, meeting goals, logistics for 2-day meeting | Nick Martorano (SWRCB) and Martha Sutula |

| | | |
|-----------------|--|---|
| | | (SCCWRP) |
| 9:30 - 10:00 | Overview of Wadeable Streams Biostimulatory – Biointegrity Science Plan | Martha Sutula (SCCWRP) |
| 10:00 – 10:40 | Development of the Algal Stream Condition Index | Susie Theroux (SCCWRP) |
| 10:40 – 10:55 | Break | |
| 10:55-12:15 | Predicting Biological Integrity in Streams Across California Landscapes | Raphael Mazor (SCCWRP) |
| | Statistical approaches to Linking Bioassessment Indices to Biostimulatory Indicators | |
| 11:35 – 12:15 | California Biological Condition Gradient model | Michael Paul (Tetra Tech) |
| 12:15 – 1:00 pm | Lunch (Catered; \$10 per person) | |
| 1:00 – 1:45 | California Biological Condition Gradient model | Michael Paul (Tetra Tech) |
| 1:45 – 3:00 pm | Stakeholder Perceptions and Concerns | Brock Bernstein (Facilitator) SAG Sector Leads |
| 3:00- 3:15 pm | Break | |
| 3:15 – 5:00 pm | Science Panel Closed Session | |
| 5:30 pm | Science Panel Dinner (Closed) | |

Day 2 (April 20, 2015)

| | | |
|----------------|--------------------------------------|--|
| 8:00 am – 3 pm | Science Panel Closed Session | |
| 3:00- 5:00 pm | Science Panel Report Out on Findings | Science Panel Chair (To Be Determined) |

Workshop on Constituents of Emerging Concern (CECs) and Aquatic Ecosystem Monitoring – the state of knowledge and practice in CA (May 1, 2017)

Details

Date: May 1, 2017

Time: 10:00 a.m. – 5:00 p.m.

Location: Sacramento Regional County Sanitation District
10060 Goethe Rd
Sacramento, CA 95827
[Map](http://goo.gl/nAO1L6) - goo.gl/nAO1L6
[Please park on the street – Goethe Rd – if you can.]

To join the meeting by web use the following link and phone:

| | |
|------------------------|---|
| Web Meeting: | https://stateofcaswrcbweb.centurylinkccc.com/CenturylinkWeb/ReneeSpears |
| Phone | 1-877-820-7831 |
| Guest Passcode: | 378390 |

Workshop Description

Constituents of Emerging Concern (CECs) are a large group of chemicals that may or may not pose a risk to human health and aquatic species. The State Water Board and Regional Water Quality Control Boards (Water Boards) have worked on several projects to monitor CECs and identify the CECs of highest risk to human health and the environment, but the efforts have not been well coordinated. Coordinating the efforts will more efficiently and effectively utilize State and local resources and work towards the overarching goal of developing a statewide strategy to address CECs. The purpose of this workshop is to share current state of knowledge on CECs and study efforts underway in the Bay-Delta and other areas of California and to structurally visit lessons learned.

Day Workshop Goals

- Information sharing. Share current state of knowledge on CECs and study efforts underway in the Bay-Delta and other areas of California. The goal of this information sharing is to bring participants to a common level of understanding regarding CECs; what has been done, what information gaps exist, and what risk analysis has been done.

- Lessons learned. Share information on studies conducted and lessons learned. What has worked and what has not been effective. This discussion will help participants adaptively manage their programs.
- Statewide consideration. Discuss statewide interest for CECs, and the potential study types needed to inform future statewide consideration (e.g., pilot's "risk-based" approach).

Day 1 Workshop Agenda

1. Sign up and Introduction 10:00 a.m. – 10:15 a.m.

2. Approaches to Monitoring and Addressing CECs - Statewide and Regionally 10:15 a.m. to 12:00 p.m.

Discussions focus on:

- What is regional and statewide programs overall approach to monitoring or studying CECs?
- How did programs translate management questions regarding concern over CECs into the (regional) monitoring program?
- How is the monitoring or special study project funded and how were the sites selected?
- What was learned to date from these efforts?
- How did the results inform management actions?
- What still needs to be done and what are steps and obstacles to achieving success?

Speakers

- SF Bay Story
 - Naomi Feger or Tom Mumley (SF Bay Regional Board) 10:15 a.m - 10:35 a.m.
 - Rebecca Sutton (ASC) - SF Bay CEC including micro plastics 10:40 a.m. — 11:00 a.m.
 - Karin North (Palo Alto) - SF Bay POTW perspective – As a permittee feedback and perspective of the efforts and results of the bay RMP 11:05a.m – 11:25 a.m
- Southern CA Bight Story
 - Joe Gully (LA County San) - LA POTW perspective - As a permittee feedback and perspective of the efforts and results of the SoCal efforts, as well as a statewide perspective. 11:30 a.m. – 11:50 a.m.
- Discussions, Q & A 11:50 a.m. – 12:00 p.m.

Lunch 12:00 p.m. - 1:00 p.m.

3. CEC Research and Monitoring Science and Technology (Tools) Overview

1:00 p.m. to 3:00 p.m.

Discussions focus on:

- What are the different approaches to monitoring?
- What is the current state of monitoring and assessment tools?
- What labs and resources are available?
- How comparable are analyses?
- What are current benchmarks for biological effects?

Speakers

- Southern CA Monitoring and Studies
 - Keith Maruya, (SCCWRP) – Incorporating bioanalytical screening and non-targeted analysis for CEC monitoring **1:00 p.m. - 1:20 p.m.**
 - Alvina Mehinto (SCCWRP) – Lab and field-based biological monitoring of CECs **1:25 p.m – 1:40 p.m.**
- Northern CA Monitoring and Studies
 - Rebecca Sutton (ASC) - SF Bay CEC including micro plastics **1:45p.m. – 2:05 p.m**
 - Thomas Yang (UCD) – Analytical tools for comprehensive micropollutant analysis **2:10 p.m. – 2:30 p.m.**
 - Richard Connon (UCD) – Bioanalytical techniques and thresholds (*In vivo*) **2:35 p.m – 2:55 p.m.**

Coffee Break 3:00 p.m. – 3:15 p.m.

4. State Water Board work: what is on the regulatory horizon, what data and information is accessible, and what are the study and management questions or issues are being tackled from SB or statewide?

3:15 p.m. to 4:35 p.m.

Discussions focus on:

- Based on statewide data, what are we finding in the state?
- What are pathways for management actions at the State and Federal level?
- What should a statewide phased approach look at?

Speakers:

- SB Recycled Water Program **3:15 p.m. – 3:35 p.m**
 - Claire Waggoner
- Drinking Water Program **3:40 p.m. – 4:00 p.m.**
 - Mark Bartson

- DTSC's use of CEC Monitoring Data to regulate Consumer Products 4:05 p.m. – 4:25 p.m.
 - Daphnie Molin
- CEC Data Science Overview 4:25 p.m. – 4:40 p.m.
 - Greg Gearheart, Rafa, Michael, or Michelle-aggregated data and accessibility of tools and data

Closure – discussion, questions, wrap up, next steps, etc. 4:40 p.m. to 5:00 p.m.